THE GATEWAY

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IMPORTANT NEW DISCOVERY BY PROFESSOR J. B. COLLIP

Glucokinin, the New Substance, is of Great Scientific Value.—Obtained from Vegetable Source.—Its Action is Similar to Insulin.—May Prove Superior Clinically.

Much has appeared in the press since the Spring of 1922 with reference to diabetes and insulin. In this connection a new and interesting development has just taken place. Professor J. B. Collip of the University of Alberta who was associated with the discovery of insulin, has recently discovered a new substance the action of which is somewhat similar, although it is derived from an entirely different source. This new substance which promises to be even more useful than insulin, he has called "Glucokinin."

What is the meaning of all these discoveries? All the average reader understands is that there is a disease called diabetes which is treated with a substance called insulin, or may possibly be treated with a substance called glucokinin. To appreciate the significance of all that is being written on this subject it is essential to know, first, the nature and the chief causes of diabetes, second, how insulin is obtained and what is its action when administered to a diabetic patient, and, third, what is glucokinin. Again, in order to arrive at a proper understanding of the whole subject it might be advisable to pass a few general remarks on how the normal human body manages to keep on functioning as continuously and as steadily as it does.

The Human Furnace

To function at all the human body must produce heat energy just as a furnace in a factory or a home is made to produce the necessary heat energy to perform the required amount of work or to supply the necessary warmth. It is in this respect particularly that the human machine is very analagous to the inanimate furnace.

A furnace is made to produce heat when it is supplied with fuel and with materials for lighting it. The types of fuel in use are many. Let us suppose in this case that the fuel is of the slow-burning type—hard coal, and the kindling of the quick-burning type—wood shavings. Hard coal, although slow-burning, contains much heat energy(more than soft coal) and is very difficult to get it started to burn unless some form of kindling is used. Once the coal is set on fire the furnace begins to produce heat and continues doing so for as long as it is supplied with fuel. Heat is evolved when the coal is transformed into ashes, carbon dioxide and water-vapour. The heat is used to warm the house or drive the factory engines, as the case may be, the ashes drop to the bottom of the furnace and are later taken out; and the carbon dioxide and water-vapour go up the chimney as smoke. Should the temperature of the house go down or should the factory-engines move irregularly or stop entirely it would immediately be taken as an indication that the furnace might not be working properly. Investigation would probably show that the fuel in the furnace has either ceased to burn or is not burning properly. The whole difficulty may be solved by an adjustment of the draughts.

Similarly with the human furnace. It will produce heat when it is supplied with fuel which is known as food. Just as there are various types of fuel there are various types of food. For example fat is slow-burning fuel for the human furnace and sugar is quick-burning. Sugar and fat correspond respectively to kindling and hard coal. Inside the body fat cannot burn properly without sugar. So long as the healthy body is supplied with the necessary amount of food it will continue to burn it and produce heat. Heat is then evolved when the food is transformed into ashes, carbon-dioxide and water-vapour. The heat is used to perform the various internal and external functions of the body; the ashes are excreted from the body chiefly in the form of urine; and the water-vapour and carbon-dioxide are exhaled through the lungs. Should an individual fail in health and should he show certain typical symptoms, such as sugar in the urine, it would immediately be taken as an indication that the human furnace might not be working properly. Investigation would probably show that some of the fat and sugar taken in as food (fuel) remains unused (unburned) in the blood. In this case, too, perhaps the difficulty could be overcome by an adjustment of the draughts of the human furnace.

Symptoms of Diabetes

An individual is said to be a diabetic or suffering from the condition known as diabetes when the sugar he ingests as fuel remains unused or unburned in his body. That is, diabetes is a disease caused by a disorder of the body-tissues which renders them incapable of transforming fuel-sugar into heat energy; or, to use the words of the medical man, which mean the same thing, diabetes is a disease caused by a disorder in sugar-metabolism. Metabolism means the process of transforming fuel into heat energy and waste products, the body using the former and excreting the latter. Some of the indications that an individual is suffering from diabetes are:—sugar in the urine, abnormal amount of sugar in the blood, excessive amount of urine per 24 hours, excessive thirst, tremendous appetite, progressive loss of flesh, etc.

It has been shown that one of the effects of the non-burning of sugar is that fuel-fat also remains unburned in the body: the kindling (sugar) which normally helps it to burn is unable to do so in the body of a diabetic patient. What happens to the fat? Instead of the harmless normal waste-products of fat-metabolism, poisonous acid bodies are formed. These poisonous bodies circulate in the blood to all parts of the system. When the production of acid bodies reaches a certain stage death follows with an intervening period of profound unconsciousness. Briefly and generally speaking, then, in the condition known as diabetes, sugar and fat in the body are incompletely burned, poisonous acid bodies are produced, certain definite symptoms are manifested and death follows.

Earlier Work

The problem which had confronted the medical profession for many years was to find out what caused this metabolic disorder, to discover the cause which interfered with the burning of sugar in the human body and thus indirectly interfered with the burning of fat.

The first step towards the solution of this vitally important problem was taken by Minkowski and von Mering about 40 years ago. Those two scientists made a series of observations on animals whose pancreases (sweet breads) had been taken out. (A pancreas is a gland, like the liver or the kidney, found inside the body of higher animals and man) . Minkowski and von Mering observed that the removal of the pancreas produced a condition of diabetes in the animal which had its pancreas removed. The fact that removal of the pancreas produced diabetes would naturally lead to the supposition that this gland, in some unknown way, had something to do with diabetes. That is exactly what scientific investigators thought of after the discovery of von Mering and Minkowski.

Lepine, for example, offered the suggestion that probably the pancreas normally produced a substance which was necessary for the burning of sugar in the body. The assumption which would naturally follow such a suggestion would be that the pancreas of the diabetic patient was either not functioning properly or had ceased to function entirely. That is, the pancreas was no longer producing a sufficient quantity of that substance which was supposed to be essential to the body before it could burn sugar. Such a pancreas would be a diseased pancreas.

Let the reader now turn for a moment to the analogy which was drawn between the human body and the furnace. It was intimated that investigation might show that the mal-functioning of the furnace was due to a poor adjustment of the draughts. In that case, adjustment of the draughts, such as opening them and letting in an air-current, would make the coal in the furnace burn better. According to Lepine's suggestion, then, the pancreas would be the draughts of the human furnace. For if the pancreas could be so adjusted that it would produce the necessary amount of the substance which is supposed to cause sugar in the body to burn, then the symptoms of diabetes would disappear and the diabetic patient would return to normal health. Obviously it is not possible to adjust the pancreas as the draughts of an ordinary furnace are adjusted. Therefore the solution of the problem still remained to be found.

More Recent Work

From time to time, during the past 30 or 40 years, many research workers attacked the problem from various angles. Their object was to get a conclusive proof that the pancreas did produce a substance which influenced sugar metabolism in the animal body. The observation of von Mering and Minkowski proved this only in a negative way. A positive proof would be if a satisfactory extract could be obtained out of a pancreas so that when injected into a diabetic animal it would alleviate the symptoms of diabetes; i.e., the percentage amount of sugar in the urine and in the blood would be reduced, etc.

All experiments and investigations gave indirect support to the theory that the pancreas produced a chemical substance which was carried in the blood to all parts of the body and activated the body-tissues in a manner that enabled them to burn fuel-sugar. A substance so produced and which could act in such a way is technically termed a hormone. To extract this substance from the pancreas, or to obtain this pancreatic hormone was the real problem.

Professor J. B. Collip

"Many attempts were made to obtain direct proof of the presence of this hormone; thus diabetic animals were given extracts of pancreas prepared in various ways, or blood from the pancreatic veins of normal animals was injected into them, but with no definite benefit," says Dr. J. J. R. MacLeod in an article published in the British Medical Journal of Nov. 4th, 1922. Again, in an article entitled "Further Clinical Experience with Insulin" which appeared in the January 6th, 1923, number of the British Medical Journal, Drs. Branting, Campbell and Fletcher of Toronto write:

> "A careful survey of the literature published previous to the use of insulin indicates that all attempts to obtain a potent pancreatic preparation suitable for the continued treatment of this disease (diabetes) have failed. Many investigators have reported temporary success in the treatment of diabetes with pancreatic preparations . . . . Mention, however, should be made of the work of Zuelzer. In 1908 Zuelzer and his associates reported their results in the treatment of six cases of diabetes with a pancreatic extract obtained by expressing the juice from the pancreas . . An improvement in the general condition of all patients treated was observed following the injection . . . . The injection of the extract in these five cases was accompanied by severe chills, fever, and occasionally vomiting . . . . Owing to its extreme lability (instability) and the severe toxic reaction following its administration the extract prepared by Zuelzer did not come into general use in the treatment of diabetes . . . ."

According to Drs. Banting, Campbell and Fletcher, then, many investigators, and particularly Zuelzer, had obtained more or less positive proof of a pancreatic hormone, and more than suggestive evidence that this hormone or pancreatic extract lessened the symptoms of diabetes when administered to patients suffering from the disease. The real difficulty—and only difficulty—was that the extracts had not been properly prepared. Its administration was accompanied by "severe chills, fever, and occasionally vomiting." Zuelzer's extract did not come into general use because of the poisonous reaction which followed its administration. The real problem which now confronted the men of science was the development of a method for the preparation of a satisfactory pancreatic extract.

Under the direction of Professor J. J. R. MacLeod and in collaboration with Mr. C. H. Best, Dr. F. G. Banting carried out experiments along this line in the Laboratory of Physiology of the University of Toronto. These gentlemen set themselves the task of preparing a pancreatic extract which would contain the hormone in an active form. It had been assumed that in all previous extracts the hormone had been rendered inactive by the presence of other substances in the extract. Dr. Banting suggested that these other substances might be excluded by making the extract from a degenerated pancreas. The suggestion was a happy one and according to Dr. MacLeod much credit is due to Dr. Banting for this. The extract obtained from the degenerated pancreas gave fairly good results; for on administration to diabetic dogs it reduced the percentage of sugar in the blood and diminished the amount of sugar excreted in the urine. But "the extract used by Banting and Best," says Prof. MacLeod, "was found to cause a certain degree of local irritation."

However, the observations by the above three investigators confirmed conclusively the theories of previous investigators and proved positively what Zuelzer had almost demonstrated; viz., the production by the pancreas of a substance (or hormone) which was necessary to the body for the burning of sugar. To put it differently, as a result of Dr. Banting's suggestion and the observations made by him and his two colleagues it was definitely shown that the pancreas does contain an antidiabetic hormone.

Insulin

But the problem of obtaining an extract from the normal or undegenerated pancreas still remained to be solved; and on its solution depended the practical value of the work done by Dr. MacLeod, Dr. Banting and Mr. Best. It was at this stage of the work, December 1921, that these three gentlemen were joined by Dr. J. B. Collip, head of the Department of Biochemistry of the University of Alberta, who, at the time, happened to be in Toronto. Dr. Collip working in the Laboratory of Pathological Chemistry of the University of Toronto discovered a satisfactory and practical method for the extraction of the pancreatic hormone in a practically pure form. The pancreatic extract obtained by Dr. Collip's method was called "Insulin."

The value and importance of Dr. Collip's work will be better appreciated from the following quotations. In the article in the British Medical Journal already quoted, Dr. MacLeod says:

> "The presence of a hormone capable of alleviating the symptoms of diabetes both in laboratory animals and in man having been definitely established, it remained to devise suitable methods for the preparation in quantity of an extract containing it and to investigate thoroughly the extent and nature of its physiological and therapeutic actions.
>
> "Since the extract used by Banting and Best in the clinical observations referred to was found to cause a certain degree of local irritation, it was necessary, before further clinical trials could be undertaken, to prepare it in proper form. This was successfully accomplished by Dr. J. B. Collip by a method of fractional precipitation with alcohol, the principle of which is described elsewhere, and which is the one now used for the preparation of insulin in larger quantity."

"Pancreatic Extracts" in the Treatment of Diabetes Mellitus" is an article prepared by Drs. Banting, Collip, and Fletcher and Mr. Best. It appeared in the March, 1922, number of the Canadian Medical Association Journal and, in part, reads:

> "As the results obtained by Banting and Best led us to expect that potent extracts, suitable for administration to the human diabetic subject, could be prepared, one of us (J. B. Collip) took up the problem of the isolation of the active principle of the gland. As a result of this latter investigation, an extract has been prepared from the whole gland, which is sterile and highly potent, and which can be administered subcutaneously to the human subject. The preparation of such an extract made possible at once the study of its effects upon the human diabetic . . . . "

In the Transactions of the Association of American Physicians, 1922, was published a paper entitled "The Effect Produced on Diabetes by Extracts of Pancreas." This paper was prepared by Drs. Banting, Campbell, Collip, Fletcher, MacLeod, and Noble, and Mr. Best. They wrote:

> "Working with small quantities of gland one of us (J. B. Collip) succeeded by this method in preparing highly potent extracts that contained a low concentration of inorganic salts, no fats, only small amounts of protein, and were sterile bacteriologically. The clinical cases to be referred to later were treated with this extract which we propose to call 'insulin.' It is apparently quite harmless both to laboratory animals and to man when given in proper dosage, but in excessive amounts certain toxic symptoms supervene."

Pancreatic extracts, then, prepared according to Dr. Collip' method and administered hypodermically (under the skin) to a diabetic adjusts the draughts of the human furnace, causes sugar to burn, causes (indirectly) fat to burn, alleviates the symptoms of diabetes and becomes responsible for the return of the patients to normal health. It is important to note here that, with rare exceptions, the patient will enjoy good health as long and only as long as he keeps on taking every day the necessary amount of insulin to cause the burning of the sugar contained in his daily diet.

Since its discovery in January, 1922, insulin has been ued clinically in many hospitals with great success. Under the direction of Dr. Collip and Dr. Heber C. Jamieson (lecturer in Clinical Medicine at the University of Alberta) about 25 diabetic patients have been treated with insulin at the University Hospital in Edmonton.

To protect the public from the dangers of commercial exploitation a patent covering the production of insulin was obtained by the discoverer of its method of preparation, Dr. J. B. Collip, and his two colleagues, Dr. Banting and Mr. Best. The patent has been generously turned over to the University of Toronto.

The discovery of insulin appears to have been preceded by two distinct steps. The first step was Dr. Banting's suggestion to use a degenerated pancreas followed by his observations and those of Dr. MacLeod and Mr. Best. The second step was the discovery by Dr. Collip of a satisfactory method for the preparation of insulin. Each one of the four investigators deserves an equal share of the world's gratitude and praise.

Glycogen

The human furnace functions continuously; once it stops (death) it cannot be made to start again. It has been said that sugar is essential to this furnace. As a general rule the body is stocked with sugar about 3 times a day—at breakfast, lunch and dinner. It has also been stated that sugar is, like kindling, a quick-burning type of fuel. The question may then be asked, how is the furnace kept supplied with sugar in the intervals between meals? The answer is very simple. There is, apparently, a special mechanism in the body which regulates the supply of sugar. It i quite obvious that all the sugar taken in one meal is not burned up at once. Most of it is stored up in the liver and other parts of the body. In accordance with the needs of the human furnace the sugar is taken out of these storehouses. It has, however, been proved experimentally that the body cannot store up sugar as such. The special mechanism referred to above has a double function. First, it changes all the surplus sugar taken in during a meal into a substance called glycogen and causes it to be stored up in that form. Second, when the furnace needs more sugar this mechanism comes into play and changes the glycogen back into sugar ready for burning. Apparently the pancreatic hormone is part of this mechanism which causes the formation of glycogen. In fact, Dr. Collip, in collaboration with Drs. MacLeod and Banting and Mr. Best, demonstrated that insulin (pancreatic hormone) had this power of glycogen formation, in addition to the influence it exerted on the burning of sugar. It is this demonstration or discovery which paved the way for the latest research work done by Dr. Collip in the Laboratory of Biochemistry in the Medical Building of the University of Alberta.

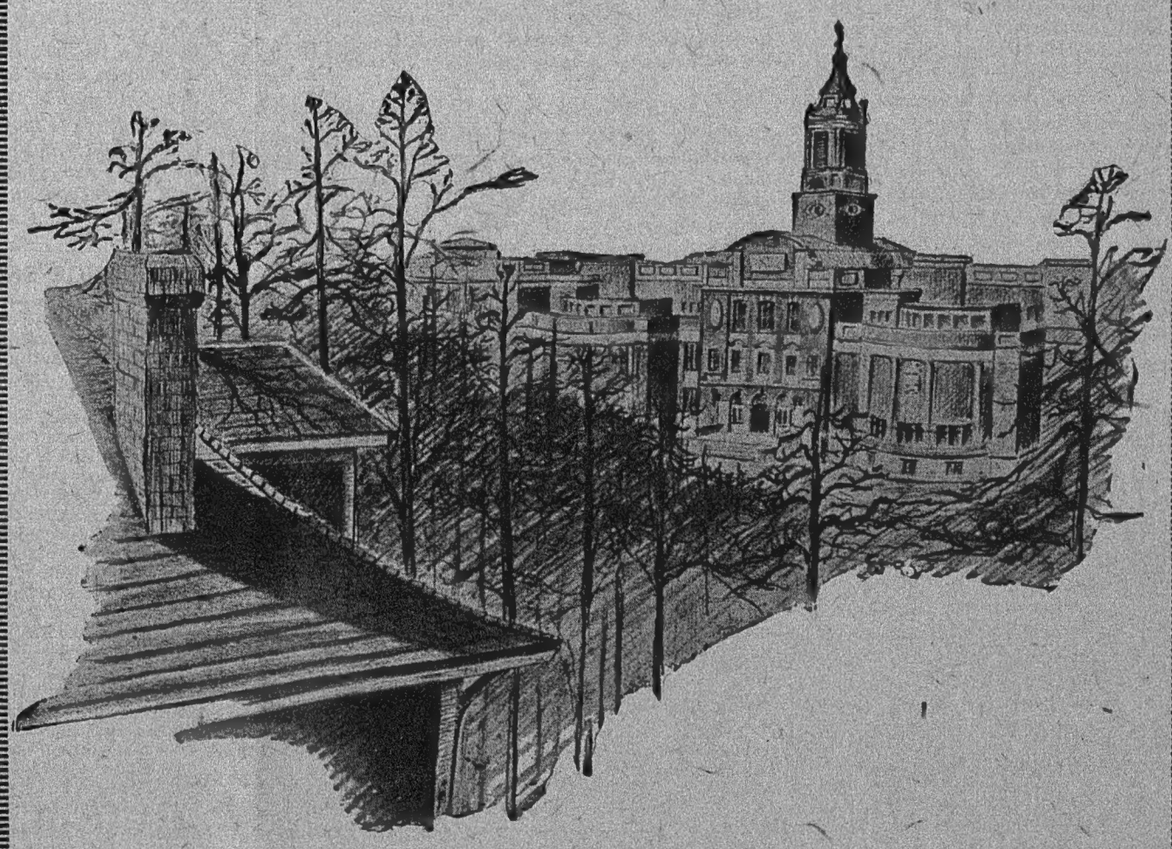
Yeast Extracts

On his return to Edmonton from Toronto, in the summer of 1922, Prof. Collip immediately started experiments with the object of confirming his idea that the presence of glycogen was an indication of the presence of a hormone similar to the hormone in the pancreas. Clams (a type of shell-fish), yeast (of vegetable origin), and fungus (vegetable organism such as mushrooms) contain glycogen. Dr. Collip was immediately successful in demonstrating the presence of a hormone in the clam. This hormone was, of course, of animal origin.

Experiments with yeast were made for many long months without obtaining satisfactory results. In spite of repeated failures, Dr. Collip persevered. Finally his efforts were crowned with success when on January 26th, 1923, he obtained an extract of yeast; and on January 27th he announced to one of his classes in Biochemistry that he had been able to produce with this extract a decrease in the percentage of blood-sugar in a normal rabbit. Since that date Professor Collip has prepared potent yeast extracts by different methods. Some of these

(Continued on page six)

Over The Tree Tops



By Professor W. Rowan

THE GATEWAY

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PROF. COLLIP'S DISCOVERIES

University life is youth itself at its best, at its richest years, with senses, mind, feelings or sentiments susceptible to slightest influences. The whole world lies before it, inviting and alluring. The student is heir to the past accomplishments of the world of culture. Armed with this heritage he should sail forth into the world to conquer for humanity its unknown parts. Emerson wrote, "Who hath access to this universal mind is a party to all that is or can be done." To attend lectures, to read in the library, to study at home is to appropriate in a few hours of college life the benefit of long researches and investigation of scientists of past generations. In addition, students have an opportunity of studying methods of research and investigation by following the experimenta work of those among their professors who are devoting much time and concentrated thought to the unravelling of nature's mysteries.

* * *

In the laboratories of all higher seats of learning research work is carried on more or less continuously by professors and graduate-students. From time to time the news of a new discovery or of a new and better way of solving old problems is flashed over the wires to the four corners of the earth. The world welcomes the news; for new discoveries are usually a means of either alleviating human suffering or adding to the happiness of man.

* * *

A few weeks ago a great feeling of pride and pleasure spread across the campus of the University of Alberta when it became known that Dr. J. B. Collip, Professor of Biochemistry, had obtained satisfactory results from experiments he had been performing during the past few months. It will be remembered that about a year ago the press announced that ,as a result of investigations which were being carried on at the University of Toronto by a group of four men, a substance which could be safely used for the treatment of diabetes was obtained from the pancreas of an animal. The history of this discovery, as related in a number of scientific journals and pamphlets, is of special interest to us today since one of the four investigators was Dr. J. B. Collip, who spent the winter of 1921-22 in Toronto.

* * *

About 40 years ago von Mering and Minkowski discovered that removal of the pancreas from the body of an animal was followed by diabetic symptoms in that animal. This discovery was interpreted by scientists and investigators as a negative proof that the pancreas produced an internal secretion, or hormone, which exerted a marked influence on the metabolism of sugar in the animal body. This view was strengthened by experiments carried out from time to time by many research workers such as Starling and Knowlton, Lepine, E. L. Scott, etc.

In an article entitled "Insulin and Diabetes," which appeared in the British Medical Journal, Nov. 4th, 1922, Dr. J. J. R. MacLeod writes:

> "Many attempts were made to obtain direct proof of the presence of this hormone; thus diabetic animals were given extracts of pancreas prepared in variou ways . . . . but with no definite benefit. . . . The hope that, in spite of these more or less unsatisfactory results, a method would some day be discovered for the preparation of a pancreatic extract capable of alleviating the symptoms of diabetes was sustained by the publication from time to time of researches . . ."

The things hoped for, then, were positive proof that the pancreas produced an internal secretion, and the development of a satisfactory method for "the preparation of a pancreatic extract capable of alleviating the symptoms of diabetes".

In collaboration with Mr. C. H. Best, Dr. F. G. Banting (both of the University of Toronto) obtained positive proof that the pancreas did produce an internal secretion which influenced sugar metabolism in the body. They prepared pancreatic extracts which reduced the percentage of blood sugar; but apparently these extracts were not chemically satisfactory for therapeutic purposes. Thus, in the article in the British Medical Journal, mentioned above, we read:

> "The presence of a hormone capable of alleviating the symptoms of diabetes both in laboratory animals and in man having been definitely established, it remained to devise suitable methods for the preparation in quantity of an extract containing it and to investigate thoroughly the extent and nature of its physiological and therapeutic actions.
>
> "Since the extract used by Banting and Best in the clinical observations referred to was found to cause a certain degree of local irritation, it was found necessary, before further clinical trials could be undertaken, to prepare it in purer form. This was successfully accomplished by Dr. J. B. Collip by a method of fractional precipitation with alcohol, ... and which in all essential details is the one now used for the preparation of insulin in larger quantity."

One of the two hopes of research workers was realized then by the work done by Dr. Banting and Mr. Best, who were afforded facilities and assistance by Professor MacLeod (University of Toronto) in whose laboratory of physiology the experiments were performed. The second hope was realized by the work done by Dr. Collip in the laboratory of pathological chemistry of the University of Toronto.

That the development of a satisfactory method for the preparation of the extract was of the greatet practical importance may be gleaned from the following excerpt from an article entitled "Pancreatic Extracts in the Treatment of Diabetes Mellitus" which appeared in the March, 1922, number of the Canadian Medical Association Journal: (This article was prepared by Drs. Banting, Campbell, Collip, Fletcher, and Mr. Best)—

> "As the results obtained by Banting and Best led us to expect that patent extracts, suitable for administration to the human diabetic subject, could be prepared, one of us (J. B. Collip) took up the problem of the isolation of the active principle of the gland. As a result of this latter investigation, an extract has been prepared from the whole gland, which is sterile and highly potent, and which can be administered subcutaneously to the human subject. The preparation of such an extract made possible at once the study of its effects upon the human diabetic . . . . "

The same group of investigators prepared a paper called "The Effect Produced on Diabetes by Extracts of Pancreas", which was published in the Transactions of the Association of American Physicians, 1922. The following quotation from this paper tells us that the term "insulin", of which the public has heard so much during the past year, is applied to the pancreatic extract obtained by Dr. Collip's method:

> "Working with small quantities of gland, one of us (J. B. Collip) succeeded by this method in preparing highly potent extracts that contained a low concentration of inorganic salts, no fats, only small amounts of protein, and were sterile bacteriologically. The clinical cases to be referred to later were treated with this extract which we propose to call 'insulin'. It is apparently quite harmless both to laboratory animals and to man when given in proper dosage, but in excessive amounts certain toxic symptoms supervene."

The great clinical value of insulin is that it is a pancreatic extract which can be and is administered subcutaneously without fear of any local reaction.

"At this stage of the work it also became necessary," to quote Dr. MacLeod again, "to find some simple, readily available laboratory method for testing the potency of the preparations of insulin" and to devise "a method of pharmacological dosage to serve as a guide for the clinical dosage." Satisfactory experiments with a view of finding out the characteristics of insulin were made. It was discovered, for example, that insulin reduced the percentage of blood sugar in normal rabbits and that an overdose of the substance produced highly characteristic convulsions with intervening periods of coma, which finally terminated in death unless a subcutaneous injection of sugar (glucose) was administered in time. "These discoveries," according to the writer of the article in the British Medical Journal mentioned above, "to which Dr. Collip contributed much, opened the way to more extended physiological investigations."

* * * *

In spite of the fact that the daily press has given him no prominence, there is no question that Dr. Collip's share in the discovery of insulin is of the greatest scientific and practical value. Those who know him well, know that Dr. Collip is an indefatigable worker. He devotes practically all of his spare time to working hard in his experimental laboratory in our Medical Building. He has no mercenary motive, and he does not care for publicity: pleasure of service, love of knowledge and the joy of discovery are his motive power. Sir Humphrey Davy's words in connection with his discovery of the miner's safety lamp may be aptly uttered by Dr. Collip, "My sole object was to serve the cause of humanity, and if I have succeeded, I am amply rewarded in the gratifying reflection of having done so."

* * * *

"Glucokinin" is the name Dr. Collip has given to an internal secretion he has recently obtained from a vegetable source. With this extract he has carried out a few experiments with such success that the discovery of "Glucokinin" may definitely be said to have scientific value and may prove to be of the greatest importance in the field of clinical medicine. It is this incessant research work which gives Dr. Collip the first place in the esteem of men who are best able to judge, and the highest honor and respect in the esteem of professors and students of the Universiyt of Alberta, who realize how hard and faithfully he has been working.

* * * *

Otis T. Mason said "The only moment in the life of an individual or a people in which the distinction of true humanity may be worthily bestowed on them is that in which something new is added to the stock of knowledge or experience. When men or nations originate they live and grow; when they cease to do that they decay and die."

On Dr. Collip and, through his work, on the University of Alberta, "the distinction of true humanity may be worthily bestowed." Dr. Collip and the University of Alberta shall live and grow because they originated and are still originating.

The medical profession in Alberta is certainly appreciative of Prof. Collip's contributions to the science of medicine. A few months ago the College of Physicians and Surgeons of the Province of Alberta put at Dr. Collip's disposal $5,000 to use in connection with laboratory and clinical experiments in the treatment of diabetes.

Since the University is a provincial institution, we may say that in addition to the staff, students and friends of the University, Alberta is proud of Dr. Collip's achievements.

Hand in hand with our congratulations to Dr. Collip go our apreciation to the University authorities for the encouragement they have given and the facilities they have offered for the carrying on of research and experimental work.

DRAMAT "A'S"

The by-law passed by the Dramatic Society, laying down the conditions and restrictions in regard to the recommending of students for the "A's" presented by the Students' Union is highly commendable. As far as the Dramat is concerned it is the necessary sequel to the amendment recently passed in the Union, for without some such regulation the decorations might be recommended on different standards each year, according to the fancy of the executive. With this provision in black and white, however, the course for the executive is clear, and among the actors themselves there can be no feeling of injustice or jealousy. The example of the Dramat in this respect is one which should be followed by any other societies which contemplate the presentation of decorations to their distinguished members.

There is, nevertheless, one point which should be considered by the Dramatic Society and possibly incorporated in the by-law. Seeing that the purpose of these decorations is to encourage dramatic art of all kinds, should not some provision be made for the recognition of those who achieve success in the French Plays or the Med Plays? As these clubs are not affiliated with the Literary Association they cannot recommend their members for decorations no matter how worthy they may be. Now since those who take part in these plays are members of the Dramatic Society it would seem only reasonable that it would give them the necessary recommendations if their work came up to the required standard. As it is, however, the fact that the by-laws so carefully states that the person must have taken part in plays "of the Dramatic Society" would seem to prevent this being done. The new executive might profitably ..consider this question and make the necessary arrangements.

AN APPRECIATION

Those who work for their fellow-students in conspicuous places get their reward in the appreciation and respect shown to them, but there are others who work unseen and whose reward comes only in the sense of service rendered. Among these silent servants of the student body are many of the contributors to The Gateway, whose names never appear in print, although their articles are read with interest by all. Reader, if The Gateway has meant anything to you during your life at the U. of A. it is to these inglorious writers that you owe the debt of gratitude. At times we editors must have seemed ungrateful ourselves when, overcrowded for space, we were obliged to condense and mutilate the articles handed in or even to omit them altogether. Yet when we have again appealed to these good friends for assistance we have met with an equally ready response. The demands which have been made were not light—the notice given was often short and the task required always entailed the sacrifice of time and energy, but the willingness with which all our requests were granted has made it a pleasure to ask. Therefore, as we lay down our work for the year, we wish to express our sincere appreciation of the hearty co-operation which has made possible the little which has been accomplished. We have received help from the following:

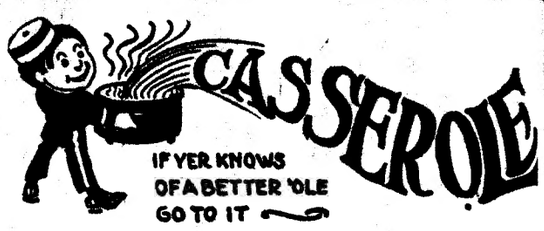
Walter Herbert, Bruce McDonald, George Salt, Jack Saucier, George Bryan, Bill Cassels, Cliff Underwood, K. D. McArthur, Leonard Wrinch, Frank Newson, Madeleine Race, Marjorie Bradford, Margaret Archibald, Charlie Reid, H. D. McKay, Pawling, W. Addinell, Albert Lang, W. Watts, W. O. Turner, Bob Baker, Ruth Balaam.

Special Departments—Beatrice Timmins, Barbara Villy, Hilda Hobbs, Kathleen McNab, Dorothy McLean, Kemper Broadus, Wilfred Wees, Cedric Edwards, Leonard Huskins, Andy Cairns, Jerry Shapter, Ted Gowan and W. J. McLeod.

Circulation Department—Ruth Becker, Jean McLennan and Marguerite Wees.

ANOTHER APPRECIATION

With the last issue of The Gateway, many break into things called appreciations. It is not because of this failing that this article appears. This case is deserved. The publishers of this delightful organ, here and now, wish to thank Mark Levey, Dunc McNeil and their gang of helpers for the splendid way they have handled their end of the game. This, perhaps, is bad Casserole—sed tamen.



Questions in Anatomy

Where can a man buy a cap for his knee?
Or a key for a lock of his hair?
Or can his eyes be an Academy
Because there are pupils there?
In the crown of his head, what gems are there?
Who travels the bridge of his nose?
Does the calf of his leg become hungry at times
And eat the corn on his toes?
Can the crook of his elbow be sent to jail?
Where's the shade from the palm of his hand?
How does he sharpen his shoulder blades?
I'm hanged if I understand.

* * *

Prof. Rowan (lecturing on the earth-worm)—"Now, if you'll attend closely, I'll just run through the alimentary tract."

* * *

"Would you let me hold your palm, Olive?"
"Not on your "Life Buoy—"

* * *

Mandy—"Suh, is you'all the reprobate judge?"
Nielson—"I am the judge of Probate, ma'am."
Mandy—"I'se done come to you'all 'cos I'se in trouble. Mah man he done died detestate and ah is left with three little infidels, and so I'se cum to be appointed der executioner."

* * *

Marriage is that process by which an unsuspecting girl is turned into an amateur detective.

* * *

She—"That dance made me dizzy. Let's sit down."
Judge Cairns—"All right. I know a nice dark corner out in the lounge."
She—"Thanks just the same—but I'm not quite as dizzy as all that."

* * *

Carlyle—"I see Adinell is taking a course in Agriculture."
Huestis: "Agriculture? How come?
Carlyle: "Well, I saw him in the Arts Building studying calves this morning."

* * *

Twinkle, twinkle, little star;
How I wonder who you are
Up there on the stage so high.
Darn that cinder in my eye!

* * *

Englishman—"Did you hear that joke about the Egyptian guide who showed some tourists two skulls of Cleopatra—one as a girl and one as a woman?"
"Scotty"—"No, let's hear it."

* * *

She—"You're writing jokes for Casserole! H.-ha-ha!"
He—"Now, look here, you're not to laugh at my jokes."

* * *

We are in a position to understand now why Mrs. MacPhee accompanies her husband to the Med. psychology clinics, when we hear of the affectionate behaviour of some of the patients, at these clinics.

P.S.—The patients are, of course, mentally deficient.

* * *

Adieu

This is the last issue of the "Rag"
And therefore old Casserole's tag.
If you were teased by the dirty pot
Rest assured she thought you a good sort;
If the dear old thing was at times rough
It is because she wished you to laugh.

GEORGE SARAVITCH

By E. Stuart

There were men of all races and ages on the "dump," but the one I learned to like the most was George Saravitch, an old Armenian. We had been worked extremely hard one day and I began to get tired about four o'clock. I do not know whether George noticed it or not, but when the "dinky" engine had puffed up with it's load of "slack" and gone flying back for more George worked like a madman and had his pile of "slack" over the edge of the "dump" before I got started. Then he came over to me and took me by the arm and said, "Kiddo, sit down, I fix heem."

"No, George," I said, "I'll do it."

"Nottinks, you sit down, take him easy. I fix heem."

"No, George."

"Sure, you sit down. I feex heem. Dis—I do this for sixty-five years. Old George he strong guy. You just young fellow, get tired. You work too hard, maybe keel himself."

So I let George do it, much against my will. That was my first good impression of George, but I was destined to see more because he, I think, really liked me.

It had been raining for almost two days and I was getting impatient with the thought of paying a dollar and a half for board, while I was not making any money. When I was swearing at the rain George came to me and said, "Whassa matter wid you yet?"

"Oh, the rain is getting my goat."

"Whassa matter? Dis rain pretty good, I tink."

"Good, did you say, George? It makes me sick. I am not making any money."

"Never mind dis money, dis you ketch heem you spend heem. Moneys nottinks, you get enough to eat and sleep, you jackaloo."

"Don't you want to make money, George?"

"Sure, you betchu. Maybe I make two hundred dollars I send heem to dis old man in Edmonton and I sleep and eat all winter. Dis shmart guy I am." I have never been able to find out who the "old man" was, but I think he was some fellow-countryman of George's who had a store in Edmonton.

We had finished our work for a while on the "dump" one day and were throwing stones at a tree to pass the time, George came over to me and sat down. He did not say anything for a while, then he began to laugh. I never met a man with as hearty a laugh as he had. It came from his heart, which seemed to be filled with the joy of living even though he was only a common cog in the wheels of industry. "Dis pretty cold water you bring, eh kiddo?" he said, referring to a pail of water I had just brought from the spring.

"You bet it is, George."

"Some day I ketch some money I goin' to buy one tent and ketch some eats and sit down by the spring over dere. Maybe I ketch um bottle of dis wheeskey I put him in dis spring and get him nice and cold. Dis pretty good, eh? Some day you an' me do dis."

"I'll tell the world, George."

"Son of a gun, I like dis wheeskey. Dis pretty good for me."

The day I quit I went in to see George to say good bye to him. He was working in a box car at the time. He saw me the minute I came around the corner and asked what was the matter.

"Oh I quit, George."

"Why you quit?"

"They did me dirt in my pay and I got sore and told Judge to go to hell."

"Oh dis son of ———. I beat dis Judge for you."

"Where are you going?"

"Oh, I guess I"ll go home."

"Say, kiddo, come here. You get lots of moneys?" And he took about a hundred dollars in bills out of his pocket.

"I've got some, George. Thanks all the same."

"Here you take this, I don't need heem. Old George not sport. He don't need money. You take heem."

"No, thanks, George. Goodbye. Some day I may see you in Edmonton."

"Sure, you bechu. I not see you if you ketch a pretty girl though."

"Do you mean to say you won't speak to me, George?"

"No. Dis you sport and you don't want old George to speak when you ketch a girl. I know dis. I old guy. I know."

"Well, if you ever see me, George, I want you to speak to me."

"Nottinks."

George kept his word. The other day I was walking down the street with a girl and I noticed George. He passed me and I said "Hello, George." He looked at me and recognized me, opened his mouth to speak, but, gentleman that he is, he turned the other way and walked on.

THAT MOONLIGHT HIKE

Bacon and eggs fried, coffee drunk, wood piled high, legs stretched out, backs supported by a log of tamarack. Beyond the reflection of the flames the shadow of the spruce is black and deep. Sparks leap into the night; are lost. A bunny scampers across the snow and wriggles into a rotten log. The coyotes yelping on the hill behind send up long weird howls, protesting against unlawful trespass of the sanctity of their night.

The flames die and in the glowing embers come conjured up fantasy paths of fortune. A support burns away and dreams are razed to a bright red mass.

As the firelight dims, the blackness of the bush retreats, the moon sprinkles the snow with silver, the borealis shoots streamers across the blue—rose, yellow and green, fusing, darting, billowing, and disappearing. The coyotes venture closer, and their long gray shadows slink among the trees. A dead branch cracks. Stillness. From across the river comes the hoot-hooting of an owl.

HE LEAGUE OF NATIONS IS THE GREAT HOPE OF THE WORLD

e and Organisation of the League.—Its Method for Dealing with International Problems.—Its Difficulties and Great Successes.

Professor Burt, head of the Department of History of the Depart- of History of the University of Alberta, gave a most stirring address onvocation Hall at the last Sunday service. To appreciate the working anism of the League of Nations and to realise the benficial influence exerting in maintaing the peace of the world it is essential to have rect knowledge of the successful efforts of the League since it came existence. This information Professor Burt placed before his audvividly and clearly. Most of those present at the service must have d at the correct conclusion that the despatches which appear in the press from time to time are not the best foundation on which to unbiased judgment of the great part the League is playing in settling ational questions and averting catastrophies similar to the one started y, 1914.

Professor Burt's addresses on the League of Nations are attracting attention in the city. For the benefit of those of its readers who not had the pleasure of hearing him, The Gateway is publishing below ddress delivered in Convocation Hall:

war has shaken the world and us that we cannot live to our- that our lives are all govern- the life of the world as a

So the problem of interna- affairs is today more pressing ever before. In the past there been two agencies to deal with ational affairs. Both of these done much good, but they have heir limitations. Foreign offind ambassadors have been a nent agency, but they have slow and they could not bring arties of a dispute face to face. l international conferences, s of arbitration and many other r organizations did not have deficiencies, but they would e. Then who was responsi-

The League of Nations has organized, not to supplant, but plement this old machinery. It nes the advantages of both ies; it is permanent, it can act y, and it does bring the parties dispute face to face in an at- ere most congenial to a settle-

nature of the League is often derstood. It is neither a sup- e nor a powerless body. The ant is simply an agreement y the various member states some of their fullest freedom future for the good of them- and the welfare of the world ge. If these states are utterly and devoid of foresight, no- can save them from them- But they are not. They are unded of good and bad ele-

The purpose of the League restrict the operation of the and facilitate the expression former as far as possible.

the various parts of the 's organization, there are which stand out as most im- t, the Assembly, the Council e new International Court. Assembly, each member state ally represented, an embodi- of the principle of the equality tes. This body, which repre- the world as no other group n ever represented it, is the l organ of the League. It is tent to discuss and deal with atter of the League or of in- ional affairs generally. But it mitations. It is a large and geneous body, it meets only year, and it takes no account ther important principle in in- ional affairs. States may be in theory, but they are not in Great states will not equate elves with small states in all rs. Accordingly the Council, hich the great powers—Great n, France, Italy and Japan— rmanently, stands beside the bly. Seats are waiting for nited States and Germany. The of the tyranny of the great s is met by the Council includ- ballast of smaller powers d by the Assembly. For deal- with any problem affecting not members of the Council, tter is enlarged by represen- of such states. In the As- and the Council each state ses, according to the Covenne vote, but really what each ses is a veto. No state is to be bound by a mere major- ecisions on all important mat- ust be unanimous. There is necessary exception to this. a dispute is decided against ate, its consent is not neces- This regulation of unanimity rgely overlooked in the cam- against the League in the States. Then there is a piece of machinery, the new ational Court, the establish- of which may be regarded as t turning point in modern his- The Permanent Court of Ar- on set up in 1899 is a mis- It is not a court, but only of names from which a court ected for each dispute as it It allows for no precedent, was soon seen that it led to al compromises rather than to l decisions. So in 1907 an t was made to set up a real which could be permanent and build up a real international udence. But each of forty- nembers of the Convention in wanted to be on the court. of them would step down and was no machinery in the world the various states could trust uce the court to a practical So the ideal which all accept- abandoned as hopeless. But the war there appeared the of realizing it. The election eleven judges and four depuges was successfully turned o the Council and the Assem- the League, voting concur- Had there been such a n 1914, peace might have had ce.

difficulties of the League have been tremendous—enough to destroy it, were it not the sole hope of a shipwrecked world. It was born into an atmosphere surcharged with national hate and distrust, an atmosphere arising out of the war and the peace settlement. This explains the one failure of the League, the failure in Vilna. Poland and Lithuania quarrelled over this territory, and the League's intervention was sought. The consequent scheme of settlement was rejected by Poland who flouted the League. Why? Because France was behind her—for very natural reasons. She felt the necessity of a strong check upon the two objects of her dread—defeated Germany and Bolshevik Russia. So the failure in Vilna was not complete, for the League did not prevent open war between Poland and Lithuania. Another difficulty has been that the whole world, for which the Covenant was framed, has not entered the League. The American "great refusal" was a deadly blow. Their exclusion, by the way, is another part of the war's heritage. A third danger was that the Supreme Council of the Allies threatened to monopolize all the important problems, leaving the League only the crumbs. But the League has not been stifled, strangled or starved. It has grown in activity and strength.

One great success, which has often been overlooked because it is not spectacular, is the League's work in the Saar Basin and in Danzig, two grave danger spots in Europe. The Saar government, which is appointed by the League, faces a situation more delicate than most governments have ever faced—a vital clash of French and German interest and [illegible]. The French own the coal in the Saar and have certain other rights, but the population is German—fine material for spontaneous combustion. The criticisms of the Saar Commission are very interesting when they are traced to their origin. In 1935 the people who were resident in the Saar in 1914 will vote on annexation to France, or to Germany, or to the continuance of the present regime under the League. As the population is German, the only alternative will be between the League and Germany. Already those desirous of German annexation are fearful that the success of the League will lead the people to vote for the League, and so they have started their campaign by attacking the League's administration, carefully avoiding the regular channel whereby all complaints of the inhabitants may be laid before the Council. So these criticisms are the best proof of the success of the League. In Danzig there is a similar clash between Pole and Danziger, the latter being supported by German sympathy. An explosion might have occurred at any time, had it not been for the presence of the League's High Commissioner with full authority to decide all disputes between Poland and Danzig.

There are other more conspicuous successes. The League prevented war in the fall of 1921 when a Serbian army invaded Albania and raised the spectre of another Balkan War. At once the Council met, despatched a commission to investigate, and decided that any necessary military intervention should be undertaken by Italy. Fortunately this was not needed, for the mere threat of an economic blockade sufficed. Within one week of the first alarm, the Council, augmented for the purpose by Jugo-Slav and Albanian representatives was unanimous upon a settlement.

When Britain and France were at loggerheads over Upper Silesia, the League saved them. The plebiscite which was to guide the Supreme Council in determining the fate of Upper Silesia was puzzling. The Poles and Germans were so intermingled that it seemed impossible to draw a frontier. France said it must be annexed to Poland, and Britain was just as set upon union with Germany. So the Supreme Council broke down in a deadlock and threw the insoluble problem to the League Council which settled it for them, to the great relief of Europe generally.

When the Assembly was sitting last September the reflux of the Turkish tide threatened to sweep into the Aegean a swarm of miserable refugees numbering several hundred thousand. In pre-war days this government and that government would have been appealed to, with the probable result that disaster would have come before aid. But they appealed to the League and the latter leaped to the task. Within twenty-four hours of the receipt of a telegram from Constantinople, a scheme was launched to save them. Dr. Nansen, High Commissioner of the League for Russian refugees was authorized to use his organization for the work, the League provided him with funds to start, and then the various governments came forward with the means of continuing it. Canada gave £5,000. Dr. Nansen chartered vessels to remove the refugees and arranged for urgent supplies of food from Egypt and Bulgaria, and a general co-operation with voluntary organizations was adopted. So the League saved a frightful catastrophe.

The salvaging of Austria is another success which is greater than is often realized. Austria was running a "rake's progress" in which she could not check herself. She reached the verge of a collapse which, besides destroying herself, would have dragged down some of her neighbours. A year ago four powers came to her rescue with a loan which staved off disaster for the first half of last year—but that was all. The money was consumed to meet current needs, and in a more desperate plight still Austria appealed to the Supreme Council last summer when it was meeting in the London Conference. The latter replied on August 15th, saying that Austria must not look to their countries for any more aid. Again the Supreme Council broke down on a great problem. Austria was told to go to the League. She did, and in a fortnight the Council of the League began to work on the task. By October 4th a solution was found and Austria was saved. The difficulty has been that Austria has needed to undergo a series of very drastic reforms in order to get back on her feet. But she has had no heart to undertake them, for she has had a great deficit which she could meet only by the issue of uncovered paper currency. So while she might reform herself with one hand, she would be destroying herself with the other. She was in a vicious circle. How was she rescued? An investigation was made into the time necessary to establish a budget equilibrium by means of thorough reform. It was found to be two years. The deficit during this period was also examined and fixed. Austria then pledged herself to carry through this reform and to issue no more paper currency, and several powers under the League's scheme have guaranteed a loan sufficient to cover this deficit. Austria can now turn to reform with a free heart. Moreover, [illegible] to see that self-help [illegible] hand in hand. General [illegible] labora[illegible]ment, and there is a committee of the guaranteeing powers at Geneva. The latter holds the purse strings of the loan and advances it just in proportion as it is assured by the Commissioner General that the reform is being effectively carried out. The report submitted this February to the Council in Paris shows the work progressing favorably. It is small wonder that the Austrian Chancellor, when signing the protocols last October, said "Thank God we can say today the League of Nations has not failed us!"

A new spirit has been growing in the League for some months, particularly since last September. Certainly the handling of the refugee and Austrian problems contributed to a new feeling of confidence. But this was not all. There has been an important change in the League itself. When it was established, the Council of the League was expected to be the most important body. Now it is the Assembly. A report of the Council's doings for the year has been presented to each Assembly when it met—merely for the information of the latter. But the Assembly has successfully insisted on the right to discuss fully, and to approve or disapprove of all the Council has done. Also the increase of the non-permanent members of the Council from four to six, which took place last September, has shifted the control of the Council from the great powers to the minor powers enjoying the confidence of the Assembly. The Assembly is moving in the direction of a great parliament of the world, and the Council is tending to be its executive committee.

In the Assembly, the public opinion of the world is finding a fuller expression. The British Empire came in for strong criticism on the administration of two of her mandates, Nauru and South West Africa. As all the details were not available last September, there is to be a full discussion in the next Assembly. The last Assembly discussed the Turkish War and even inter-Allied debts and German reparations—which would have been impossible a year before. At one stage, many confidently expected the League to intervene to settle these troublesome problems. Why did the League not step in? Because negotiations had already been started for the Lausanne and Brussels Conferences, and it was feared that if the League interjected itself at this critical moment it might do more harm than good. But we are wiser now than then. It is probable that the last Assembly will be regarded as a great turning point. The session opened with a general yearning that Lloyd George and Poincare would come and put their great shoulders to the wheel. But before the Assembly rose on the 30th, this feeling of weakness had given way entirely to a new feeling of strength. The League did not need Lloyd George or Poincare; it was greater than any Lloyd George or Poincare.

There are signs also that the League may be growing toward universality. The greatest obstacle to Germany's admission to the League has been that she showed no desire to enter. But this desire began to find expression last October when Bernstorff, late ambassador to Washington, appealed to the Democratic Party urging that Germany join the League. About the same time, the admission of Russia was openly discussed by The Temps, which is supposed to voice the opinion of the French Foreign Office. Moreover, the admission of Turkey lies behind all the recent negotiations with that power, and if a tolerable peace is patched up it may very probably lead to Turkey becoming a member of the League.

More interesting still is the question of the United States and the League. The worst effect of her refusal has long passed. The League has succeeded without her. And now what is taking place? Several American organizations, such as the Red Cross, have assisted the League in various aspects of its work. An American delegate participated in the recent Conference for the standardization of antitoxin sera; an American astronomer works on the Committee of Intellectual Co-operation; another is on the Health Committee; others are in the International Labour Office; and one of the eleven judges of the new International Court is an American. Now the American government is seeking to associate itself officially with this instrument of the League, and the most likely proposal yet advanced provides for an American to vote with the Council and another to vote with the Assembly when the judges are being elected. So many say that the United States is "coming in the back door.' But there are recently signs of a tide of opinion similar to that which grew from 1914 till it reached a climax in 1917, so tthat it is still possible that the United States may come round to the front door.

The League is getting down to real work and is daily commanding more respect. One great reason for this is the bankrupcy of the Supreme Council of the Allies, which some feared would dwarf the League. Now there is a growing recognition that it has failed in most everything that it has touched. Several times it has thrown the insoluble problem to the League and the latter has performed the impossible. The confidence of the world has been shifting from the Supreme Council to the League of Nations.

But there is a grave danger. In these democratic days, the breath of life of all government is public opinion. What is true of ordinary government is equally true of the League of Nations. Only in so far as it has the backing of a continuous and intelligent public opinion throughout the world can it hope to succeed. Here then lies a tremendous moral responsibility upon every one of us. We must work out our [illegible]ation through the League; it [illegible]not work our salvation for us. If we fail to shoulder this great responsibility, we will stumble along in the same old way which we all know leads to disaster.

THE PACIFIC QUESTION

After the Russo-Japanese War which ended in 1905, Japan became more and more conscious of her power. This gave rise to a desire on her part to dominate China, and for this purpose a strong army and navy were developed. These conditions favored the development of a militaristic form of government which in turn caused the growth of a party who regarded every international controversy as a pretext for war. During the last fifteen years these tendences have threatened the friendly relations between Japan and United States and many false rumours have been circulated in both countries.

One great cause of trouble has been the trade with China. Rivalry has arisen chiefly over the railroad of South Manchuria and Eastern Mongolia, which was built and maintained by Japanese capital. Japanese merchants were the greatest shippers and consequently were given preference. Some Americans wanted the governmen to interfere, to gain equal rights for the United States trade. Japan was determined to maintain her advantages and had the Americans insisted it would probably have resulted in war. Another source of suspicion was the Anglo-Japanese Alliance formed during the Great War for protection. But when with the removal of the fear of Russian imperialism and German aggression, the alliance was not broken, many thought it would be used to favor Japan in event of a war with the United States.

The Washington Conference, however, removed many of the suspicions entertained in the United States regarding the ambitions of Japan. Through an agreement between Great Britain and Japan the Alliance was terminated and thus one menace to peace in the Pacific was removed. The eight nations other than China gathered at the Conference adopted four great principles which insure the sovereignity of the Chinese government, and prevent any seizure of property or attempts to secure trade rights or interfere in the "Open Door" policy. These principles have been embodied in earlier treaties, but the fact that they were agreed to by the joint action of the Great Powers gives them a greater stability. Subsequent events point to a conciliatory attitude on the part of Japan and the Conference seems to have succeeded in averting some unnecessary trouble in the Pacific.

DE MORTIUS

"Say, pa."

"Well, my son."

"I took a walk through the cemetery today and read the inscriptions on the tombstones."

"Well, what about it?"

"Where are all the wicked people buried?"

The Eternal Near East

By H. A. Dyde

(Continued from previous issue)

Before going on to any further record of events I should like to say a word about the individual Turk. To get an idea of what the Turk himself is like one has to get away from the busy part of the city to the more secluded corners of Stamboul where he will be found sitting quietly in a cafe sipping coffee and smoking the eternal narghile. Of course the cafes are only inhabited by the men, the women do not eat anything away from home in a public place. The impression that these men give one is something altogether unlike that produced by the men of any other city of Europe. It is as though they were all,—I am at a loss how to express my meaning more clearly,—thinking the same thing. Now this idea might occur to a Southerner as he observed, superficially, and for the first time, the inhabitants of a city of Northern Europe, but this is not the same thing at all. With them it is the seriousness and preoccupation of a busy people who are thinking of actual things, while the Turks all seem to be considering something intangible and remote; they have the air of philosophers possessed by a fixed idea, or of somnabulists unconscious of their whereabouts, gazing ahead of them with far-seeing eyes as though accustomed to contemplate distant horizons, while in the expression of the eyes and lines of the mouth there is that look of vague melancholy noticeable in people who live shut up in themselves. In all there is the same gravity, the same composed manner, the same reserve of language, look and gesture. They seem all to be gentlemen educated after one pattern, from the pasha to the shopkeeper, and animated in common by a certain well-bred dignity, which were it not for the difference in dress would lead one to suppose that Stamboul had no plebeians. The expression is almost universally cold, revealing nothing of the soul and mind within, it being exceedingly rare to come across one of those open countenances so common among us which reflect like mirrors the passionate or loving or spiritual nature below, and lend themselves to a quick and accurate reading of the man. Among the Turks, on the contrary every face is an enigma: their look interrogates but never responds, and their mouths betray nothing of the impulses of the heart within. But all this is merely what appears on the surface: the dry rot is covered up: the separation of the sexes prevents the corruption from being apparent. "Sloth wears the mask of leisure," as someone has said, "and dignity is a cloak for pride." That well bred composure which seems to indicate a thoughtful nature hides in reality a moral and intellectual inertia; what appears to be a sombre moderation in their manner of life is nothing in the world but an utter absence of any life at all.

Perhaps I have tired you by continued disgression to these bypaths in my remarks. If I have you will be pleased to know that I have about exhausted the possibilities of information along these lines and intend to finish by giving a rough sketch of what has happened during the last year.

The events leading up to the actual outbreak of hostilities last autumn may be traced directly or indirectly from the Treaty which the Allies attempted to force upon Turkey after the war. The Turks would never have become reconciled to the presence of the Greeks in Smyrna, and it only hindered the rather stupid attitude of Greece in attempting to grab more that brought matters to a head. Looking back on it now it is clear that the Near East muddle is a singularly unfortunate example of the atrophy that has fallen on Allied diplomacy. Why did the Angora government have the assurance to refuse every Allied proposal in turn? Because they counted on French support in arms and diplomacy. Why did the Greeks, mobilised for war during a decade, throw themselves into still more war? Because they counted on British support. That was the essence of the situation. As The London Observer pointed out in September last, "even when Venizelos was in charge of affairs for the Greeks the settlement that was being laid down in successive Allied Conferences leading to San Remo was torpedoed and riddled by French diplomacy which with its left hand subscribed to the Treaty of Sevres and with its right hand supplied the arms wherewith the Turks were to overthrow it. It seemed as if perversity could go no further than it did at the London Conference of 1921, when at one and the same time an allied agreement was being discussed with the Greeks and the Turks, and two of the Allies, the French and the Italians, were surreptitiously making separate bargains with Deku Sarni Bey. But perversity did go further. The amazing history of M. Franklin Bouillon and his Angora walking stick with which he split the Alliance on behalf of the French government was unfolded to the accompaniment of French protestations of loyalty to the Alliance. And so on. It is a disloyal tale, of which the corrollary has been endless war between Greece and Turkey.

In March of last year certain proposals were agreed to, unwillingly on the part of Great Britain, through Lord Curzon. Their main provision was the evacuation of Smyrna by the Greek military and civil administration on the principle that Asia Minor was to be left to the Asiatics. By the same principle, in my opinion, Turkey should have been wholly excluded from Europe. If the blunder of the Sevres Treaty was to instal the Greeks in Asia Minor, the blunder of the March proposals was to bring the Turks back to Europe. It is true that there were difficulties against the exclusion of the Turks from Europe; but they were as nothing to the difficulties against the exclusion of the Greeks from Asia.

Then France intimated that she was out for still further concessions to the Turk than those of March and the Venice Conference was suggested. This looked like the counsel of despair, but before anything could be agreed upon two shocks came. The Greek government suddenly proposed a march on Constantinople and at the same time the Angora government launched an attack against the Greek lines. By September the 9th as you may remember Smyrna was occupied by the Turks and was soon afterwards in flames. Then the real danger arose, namely the danger of a Turkish Nationalist advance on Constantinople. The possibility of a Turkish recapture of Trace galvanized into action not only England but other European countries as well. The Little Entente, usually the good friend of France, played an important part in re-creating Allied unity in the Near East. The only channel of communication between Rumania and the Mediterranean lies through the Bosphorus and the Dardanelles. The Little Entente threw its full weight against the threats of Kemalist expansion.

The result of the whole unpleasant business was an Allied invitation to Turkey to a Conference at Lausanne. Of that conference you know as much as I do. The questions involved are numerous and confused and no one can make any certain estimate of what the result is to be. Certain things stand out fairly clearly. The Allies want a demilitarized zone around the Straits, they want time to get through the Straits if necessary in case of war. To do this they will possibly arrange a system of inspection of some kind to make sure that fortifications are not being laid along the Straits. Allied control of the Straits is out of the question since Eastern Thrace has been handed to Turkey, so that now she is on both sides of the Bosphorus. And finally the Allies want some sort of permanent assurance with regard to the protection of Christian minorities. The most recent plan seems to be a wholesale migration of the Greeks who inhabit Asia Minor back to Greece, and the return of all Turks in Greek territory to their own land. Whether such a plan can be made to succeed remains to be seen. The question of the protection of the Armenians cannot be said to be settled yet.

CANADA'S IMMIGRATION

The problem of Canadian Immigration is one which has always been vital but has come more forcibly to the notice of those in power during the last few years.

The opening years of the twentieth century saw enormous immigration which was suddenly arrested by the war. Following the war there has been a considerable flow of settlers from England and other parts of Europe.

It is somewhat surprising to learn that out of every seven Canadians living on the American continent two years ago, one has now permanently made his home in the United States. A large proportion of emigrants from Europe disappear; many go back to the lands the came from, but the leakage to the country south of us is amazing.

The Western provinces have a considerable number of settlers from the Far East and there has been much discussion as to the advisability of allowing these Easterners entrance. Many restrictions and qualifications have been imposed on both those who require admission to the country and those already there. What restrictions should we place on our immigration policy? Should we allow all who wish to enter Canada?

The great leakage of immigrants seems to be due in part at least to the Canadian system of finding settlements for the newcomers. Many settle on farms. We are being forced to change our immigration policy and a new one is at present under discussion at Ottawa. It will be a considerably broader policy. Publicity campaigns are being organized, and free homsteads will no longer be the drawing card to Canada. The lands open for homesteads are now so remote from railways that it is the intention of the government to bring settlers with capital into direct contact with farmers who wish to rent. In this way and through special machinery, it is hoped that the tenant farmers may eventually become landowners. The hearty co-operation of provincial governments will be necessary in order to carry out this policy successfully. Our problem of reconstruction must begin at home and by correcting weaknesses at home we can conserve a great deal of our population.

Speaking in the House at Ottawa a few days ago S. W. Jacobs said that 10,000 people were leaving Canada monthly for the United States and that he thought a policy which would be suitable for the United States would not be so for Canada. It was also stated that Canada had place for artisans, traders, and the physically and mentally fit who were ready to do farm work. A Canadian Colonization Association has been formed, but the government is also being urged to make the lot of those in Canada more acceptable before bringing new immigrants into the country.

STRIKING MUSICAL ADDRESS DELIVERED BY A MASTER

Mr. Vernon Barford Plays Upon the Emotions of Audience in University of Alberta.—A New Field of Appreciation Presented.

A short time ago, Mr. Barford read before the Philosophical Society a most interesting, instructive and entertaining paper. The choice of the subject, "Moods and Emotions in Music," was a very happy one indeed and the speaker made his remarks extremely realistic by illustrating them on the piano. Without these illustrations, which cannot be reproduced in the columns of a paper, it is impossible to do full justice to the lecture. The simple and yet artistic method adopted by Mr. Barford in developing the subject was greatly appreciated by the audience; even the most musically ignorant were able to follow him. It was a really educational address.

The subject "Moods and Emotions in Music" could be considered in so many aspects and from so many points of view that Mr. Barford decided to confine himself to one phase of it. He commenced by outlining the boundaries of the discussions and said:

"Let me speak for a few moments about the three most important heads under which music may come.

Classic Music

"I may say at once, that it is quite impossible to differentiate by any hard and fast rules between these three styles, but the following explanation may help you to understand the distinction which I wish to make.

"By **Classic or Absolute** music I want you to understand music which is built according to some very clearly defined rules of musical architecture; with a pillar here and a pillar there, an archway in the middle of exactly such and such a curve, over a door that is precisely so high and so wide; all perfectly mathematically, geometrically and trigonometrically correct:—just **so!** Of course we acknowledge that this musical edifice is very wonderful, perfectly proportioned and built of the most beautiful materials; that it is very circumspect and very massive and solid, particularly 'solid' (I might even say indigestibly solid) as some of you who have sat (and perhaps slept) through a performance of an unfamiliar and badly played 'classic' will agree. We grant—at least in public—that these glorious musical structures will still exist and be of paramount interest (like King Tutakhamen's tomb) three thousand years after their construction—I should say 'their composition.' We believe (or profess to believe) that musicians will still worship at the shrines of their builders centuries after the plaster-cast Colour Symphonies and Jerry-built Tone Poems of today have crumbled to the ground and their dust has been scattered by the cruel winds of oblivion.

"**For tonight** I want you to regard the term "Classical Music" as referring to such mathematically constructed music, music which means nothing, says nothing and brings no feelings of emotion to its hearers, unless perhaps admiration for its cleverness, its ingenuity and its 'abstemiousness'—much of it is so very dry, isn't it?

Programme Music

"By Programme Music I want you to understand that class of instrumental music which seeks to portray or, at least, suggest to the mind, a certain definite series of objects or events.

"Probably the most familiar example of this style of music would be the Overture to William Tell; Dawn—a thunder-storm threatening, approaching, breaking, dying away—the shepherd piping in the sunshine as he sits before his hut—the gay cavalcade of knights with ther ladies from the near-by castle passing along the road on their way to the tournament.

"What is, perhaps, the most famous orchestral composition by Richard Strauss is a Tone Poem descriptive of the various adventures of Cervante's Don Quixote. In it, the orchestra imitates the creaking of the wind-mill sails and the bleating of the sheep, and paints you portraits of pot-bellied Sancho Panza and poor, gaunt, broken-down, broken-kneed Rosanante.

"Elgar, in his Enigma Variations, paints in musical line and colour portraits of his various friends.

"Programme Music,—music which paints a scene or tells a story.

Romantic Music

"I want, particularly to differentiate between Romantic and Programme music. Romantic Music implies an emotional atmosphere—it seeks, not to call up a given picture but to induce a mental attitude.

"Now, please, I want nothing I have said to imply that Classical Music cannot be Romantic or that Programme Music cannot be Classical, each style so merges into the others that all the defining in the world can't really separate them,—I have simply tried to set apart one particular style of music from its fellows, because during my talk I am going to confine myself (excepting in perhaps one instance) to what I have described as Romantic Music—music which seeks to call up no picture, to portray no series of events, but simply to depict or to induce a mental attitude.

Moods and Emotions

"These two words seem to me to be almost synonymous—after all, is not an emotion simply a concentrated mood, (a sort of 'Alas my poor brother' effect) and is not a mood a more-or-less diluted emotion. A breath may kindle the spark of mild affection into an emotion of passionate love and agonizing grief wear itself out into a mood of dull sorrow.

"I would divide the various moods and emotions into two fairly defined groups which, for convenience I will describe as **Passive** emotions and **Active** emotions or moods.

"By an Active mood I want you to understand one that is dependent on some other person or object than oneself. For instance you can't just 'love'—you must love someone or something; you can't be jealous without being jealous of somebody; but you **can** be happy, just inside you—all to yourself; you can feel excitement without being excited about anything in particular; you can be afraid with a nameless and inexplicable fear.

"So these wholly personal moods I want to call 'passive' and it is to these 'Passive Moods' that I am going to confine myself tonight.

"The chief reason that I do not want to consider what I have called the 'Active Emotions' is that I have been unable to persuade myself that emotions such as love, hate, jealousy can be depicted in music unless the listener is definitely told what the music is meant to represent; nor can I persuade myself that music can induce these same emotions. I think that it would be possible for music to induce in its hearers a mood in which they would be more subject to infection by the germs of these more active emotions, but—I repeat—I cannot find that these active emotions can be directly indicated or caused by the music itself.

"So, then, our talk is to confine itself to Romantic music as differentiated from Programme Music and to what I have termed Passive or purely Personal moods and emotions.

"I would make one further elimination. No one will question the statement that a certain piece of music may bring certain emotions to a listener through association, in exactly the same way that the scent of a particular flower will often remind one of some scene or past circumstance. Doesn't the sound (I won't say 'music') of the caliope at the rear of a circus procession bring a mood of pleasurable excitement and anticipation to you through its association in your mind with one of your childhood's happiest memories? Won't the ancient and discarded hunter gallop lamely across the meadow at the first bay of the hounds or the distant sound of the huntsman's horn?

"You will see that the possibilities of music inducing moods through association are so numerous and so easily understood that we need not take them into consideration this evening.

Poetry, Painting, Music

"I believe it was the late Sir Hubert Parry who wrote the following: 'The sphere of Music is the expression of feelings, moods, impulses and emotions.'

"That music can and does fulfil its mission, (even when its means of expression are limited to the powers of a single instrument—the pianoforte—) I am going to endeavour to prove to you this evening.

In doing this, I am going to draw so many analogies between poetry and music it is possible (though I am not going to do more than mention it tonight) to find so many similarities in the work of a painter and a musician, that a consideration of the materials which are in the workshop of, and ready to the hands of a writer (in prose or verse) of a painter and then of a musician, would be of interest.

"What are the materials which are at the service of an author? Words! Words which will describe feelings, words which will express emotions, words which will paint for you the most beautiful scenes. He has all the tricks of alliteration and a thousand synonyms with which to vary his thougths.

"A Poet? A poet has all the materials which are in the hands of a writer in prose and in addition he has at his behest all the varieties of rhyme and meter.

"An artist lacks the words of the author and the meter of the poet but he has colour and he has form which is akin to the rhyme of the poet. He can only **suggest** movement and without movement there can be no meter or rhythm; nevertheless, he can depict and induce emotions. An artist can show you happiness in a group of dancing chidren—sorrow in the bended head and bowed form of a weeping woman—pity in the face of a thorn-crowned Saviour.

Melody, Harmony, Rhythm

"Now let us see what are the materials which a musician has:—The words of the writer? No! in their place—**Melody.** The meter of the poet? Yes! **Meter** of **Rhythm.** The Colours of the painter? Surely! Colours in harmony; Colours in variety of pitch; Colours in degrees of power; Colours (and these especially if he is writing for orchestra) as many, as varied and as beautiful as any on the pallette of the painter. Rhythm, Harmony, Melody: Melody, Harmony, Rhythm; and the greatest of these is **Rhythm.**

"A melody is a succession of single sounds.

"Harmony means the combination of musical sounds and the succession of such combinations. Harmony is to melody what shading, tinting and colouring are to an artist's outline sketch.

"Rhythm is the measure of time or movement by regular accents; Rhythm is to music what meter is to poetry.

Musical Dissection

"If we dissect a piece of music, and I can't help feeling that the term 'vivisect' might better be used in speaking of the analysis which some of the 'Musical Appreciation Cranks' advocate. You know, these people love to take a little Chopin Nocturne, lay it on the operating table of unsentimental knowledge, shave it with the blunt raz oorf superior erudition, daub it over with the antiseptic iodine of useless explanation, cut into its vitals with the lancet of unsympathetic analysis and perhaps discover a mild case of 'consecutive fifths' which they seize on as though they were a case of acute appendicitis, and hook out with the pincers of destructive criticism, sewing up the gaping wound with the thread of unnecessary excuses; and this for the instruction of and all before the eyes of the innocent music lover, who delighted in his poor little Nocturne and found it beautiful to the ear and restful to the heart in spite of the consecutive fifths which had never been noticed. Then the little patient is shunted off the operating table all bleedy and horrid and the Dear Musical Appreciation Cranks wonder why the one-time music lover doesn't want to take the little Noturne to his heart again and they will claim that the one-time music-lover cannot possibly be a real music-lover when he declines to witness any further musically analytical operations.

Single Musical Sound

"I beg your pardon, I have digressed; I started to say:—if we dissect a piece of music the smallest fragment we can obtain is a single musical sound. Can a single musical sound denote any mood or emotion? Simply as a musical sound, No! **No more than a single letter from a word can have any meaning.** If I gave you time to think this statement over, some of you, I fancy, might question its correctness. For this reason I am going to give you a couple of examples which at first sight may appear to contradict my claim. Do I mean to say, for instance, that the sounding of the syren on the Hudson Bay store fails to bring an emotion of anxiety to you and me, an emotion of excitement to your boys and mine? Why, of course it will, **but** it is not the musical note that brings these emotions, it is the fact that the blast of the syren is associated in [illegible] minds with a serious fire, hence the emotions of anxiety or excitement, and don't forget that that same syren early one November morning, not many years ago, roused some of us from our beds and our emotions were not of fear and anxiety, but of joy, pride and thankfulness. I may sound this note on the piano and it means nothing, but let it be sounded long on a bugle and the old warhorse (man or beast) will prick up his ears and his heart will beat faster as he is reminded of the signal for some famous charge that saved the day for Britain. Here again, it is not the sound as a musical note that produces the excitement but the memory of events with which that particular sound is associated. No, a single musical note can mean nothing and bring no emotion simply as a musical note—only indirectly, through association of that note's particular colour (or shall I say 'timbre') with some remembered scene or event. We agreed to eliminate emotions which were induced through association, therefore we may say that a single musical sound cannot produce or depict an emotion.

Single Chords

"Will a single chord formed by a combination of notes induce any particular feeling or emotion? To a limited extent, yes." At this point Mr. Barford played two single chords, differing in one note only, and continued, "Do you not feel the sunshine of the one and the shadow of the other? If they do not appeal to you quite as a happy chord and a sad one, will you not grant me at least a negative emotion, the first 'not unhappy' the second 'not bright.' I spoke of variety of colour being obtained by change of pitch, let me illustrate my meaning; my first chord loses some of its brilliance if played at a lower pitch and with a quieter tone while my "minor" chord becomes more sombre as the pitch is lowered. The higher the pitch, the greater the brilliance of colour, hence the reason that a solo pianist likes to have the upper part of his piano slightly sharp, that a violinist likes to be able to tune his instrument right up to "concert pitch" and the reason that the instruments of a military band used always to be, and still generally are, tuned a note higher than what is now called "international pitch"—all for added brilliance of colour."

Mood and Harmony

Mr. Barford played on the piano a succession of ten single musical notes forming a "scrap of melody" which gave an idea of sadness. This he followed with another fragment of melody suggesting a contented mood. The majority of the notes played were, in both instances, members of a sad (or minor) chord and of a happy (or major) chord, respectively.

"I should like to draw a parallel between the effects of individual chords and individual words. Do not many words, all by themselves and without any context suggest a mood? Can you imagine any happiness or content in the word 'gloomy'? any peace in the word 'rushing'? any softness in the word 'rugged'?

"That we find that, just as a single letter of a word can have no meaning, so a single musical sound can suggest nothing, but that, just as certain combinations of letters forming words will suggest a mood, so may certain combinations of musical sounds have a similarly distinct suggestion."

"I have tried to show you first," the speaker explained, "that certain combinations of notes, that is 'chords,' suggest certain moods, while a melody, by making use of the notes of these chords in succession suggest to the ear a combination of those sounds and so give an idea of a corresponding mood—in other words, a melody depends to a great extent on the harmony which it suggests for the mood it depicts.

A Succession of Chords

"I have shown you that a single chord may suggest a mood and I have reminded you that an enormous number of our English **words,** taken each by itself, tend to induce a mood or an emotion sometimes from their sound, sometimes from their association. Now let me take a collection of words each of which suggests more or less the same mood and illustrate for you the way in which, when a poet joins these words together, this mood is brought clearly to you. Listen to the brilliant dignity of the following series of words:—glorious— flashing— noonday—bright—gold—trumpets' peel—host.

"Let us now experiment with music:—taking three or four 'sunshiny' chords, let us string them together and see how the mood of sunny content suggested by each one of them is strengthened into a mood of — shall I say— brilliant strength. I can suggest nothing more in this example without bringing in the question of rhythm, and that I do not wish to do for a few minutes, excepting to show you how the music will gain in dignity and clusion.

breadth if I slow it off at its con-

"Now let us take a selection of words each of which suggests, to a greater or less degree a feeling of dull, dreary sadness:—darkness—weary—plods—knell— slowly —tolls. I need scarcely remind you how the poet puts these words together and draws a picture of weary melancholy.

"Try a similar experiment with music, a series of chords, each burdened more or less, with dull care; hear how the mood of grief imposes itself on you through the music.

"Before we leave this subject of chords I should like to draw one further analogy between o[illegible] language and music, an[illegible] another interesting [illegible] Did you ever no[illegible] which the cont[illegible] mood of [illegible] t me neanwhether, with the changing of a single word I can alter the whole trend of your thoughts and emotions. d see

'Hear the bells! **Silver** bells.' Does not the word suggest a scene of brightly moving gaiety and bring to you feelings of the lightest hearted happiness?

'Hear the bells! **Golden** bells.' The scene is changed; the eye no longer sparkles, the feet no longer dance, the laughing face with its aura of wind-flung curls looks demurely downwards and a feeling of peaceful happiness steals over you.

'Hear the bells! Brazen bells.' Fear replaces the quiet happiness, and a feeling of unnamed dread grips your heart and for a moment terror holds you.

'Hear the bells! Iron bells.' Fear has gone, terror vanished—in their place a leaden sorrow weighs down your whole being."

At this juncture Mr. Barford went to the piano and demonstrated very how the effect of a given chord may be changed by the context.

Rhythm

"Melody, Harmony, Rhythm:—and the greatest of these is rhythm. The fact that I place rhythm first in importance will be a surprise to most of you. Let me remind you of the definition of rhythm I gave you earlier in the evening: 'Rhythm is the measure of time or movement by regular recurring accents. It corresponds to the meter of poetry or blank verse,—Rhythm is the meter of music.

"I place Rhythm first in importance and I have no less an authority than a certain philosopher named Plato. Plato, in one of his writings says 'The morals of a people are more affected by the rhythms they use than by their melodies.'

"Now let us try and discover the why and wherefore of the important part rhythm plays in effecting the moods and emotions.

"Firstly, is not all nature rhythmical, from the stars in the courses round the sun to the rhythmic recurrence of our four seasons; from the regular alternation of day and night to the regularity of our heart beats. The regularity or rhythm of our heart beats!

"When one is in a nondescript mood of, shall I say, passive content or interest, the heart beats steadily its normal seventy-two beats a minute. When affected by violent emotion the speed and power of its beating increases, sometimes to such an extent that a blood vessel will burst. Stricken with sudden fear the heart will stop for an instant, while in a mood of sorrow or sadness its pulsations are very perceptibly slower. So does the heart respond to the emotions.

"Reverse the idea:—how does the beating of the heart affect the mind? If the heart-beats are slow and weak a mood of dreary sadness is induced; quicken the pulsations with narcotics and a feeling of exhilaration ensues.

"Now we are agreed that the heart will respond to the emotions and that, vice-versa, emotions may be the outcome of variations in the heart's action. Is it quite beyond the bounds of possibility that music, through its rhythm, may affect the heart-beats, and the heart-beats tuning themselves to the beats of the music, will automatically induce various moods and emotions in the listener?

"I, of course, dare not take the responsibility of stating that this really is the case, but I am going to show you how a slow beating rhythm in music, passing through the ear to the brain, will produce a psychic condition similar to that caused by the slow pulsations of the heart; that a quickening in the accents of the music will bring to the senses a feeling of exhilaration in precisely the same way that the heart beats, quickened by stimulants, will bring a feeling of enlivenment.

"It will be through the various dance forms that I can most easily make the first variations of rhythm clear to you.

"Let me take, first, examples of the old-time Minuet and Gavotte. The two points I would make are, first, the rhythms are of very moderate speed, and, secondly, that the accents are not very strongly marked.

"Such dance music and such dances would induce no feelings of exhilaration, just slow-moving, placid grace, or, perhaps, if the gracefulness were absent, a feeling of early or mid-Victorian self-satisfied, stodgy superiority. Such music, I claim, with its low and only slightly marked rhythm, would never make the heart beat faster or more strongly.

"Keeping for a moment to my rhythms of moderate speed, I will give it a more intense accent. Let me take a broad, steady, sturdy March. Does that quicken your pulses? I think no! But in does strengthen them and give you a feeling of elevation (I nearly said 'moral uplift') and the rather spineless diffidence or self complacency is banished and replaced by a mood of solid dignity and manly pride and confidence.

"Again a change of rhythm, this time to a waltz. One point I would make is that, although the **speed** of my dance will remain practically the same, at first my music, with its only slightly defined accents, will suggest a feeling of deliciously lazy and dreamy languor, your mind is at rest, your thought quiescent, your senses filled with a mist of sweet scents, soft lights and delicate tints—a lazy, langourous content. A change of rhythm, though not of speed, the mood of lazy langour gives place to one of vigorous activity, the lights brighten, the delicate tints become garish, the eyes which (if you were fortunate) at first caressed you, now sparkle with mischief.

"Someone may ask, 'but is not this change of mood dependent rather on the softness or loudness of the music than on the difference in rhythm?' I want to try and pro[illegible]tion of love could be portr[illegible] music; if it can, I believe the [illegible] section of this Polonaise will [illegible] in it I see the great and end[illegible] love of a great man, a great yet a tender love, 'Tender en[illegible] I quote from Huneker, 't[illegible] enough, in all faith, wherewi[illegible] woo a princess.'

"I have been gradually incre[illegible] the speeds of my rhythm or stre[illegible] ening the power of my accents, if I have succeeded in my obj[illegible] have made your hearts beat in[illegible] pathy with my music; now I [illegible] to make your pulses still more r[illegible] In my younger days my ba[illegible] friends had a habit, when 'th[illegible] were getting nicely warmed up[illegible] they were enjoying a mood of [illegible] or less sparkling exhilaration (c[illegible] not solely by my music, be it [illegible] they had, I say, a habit of be[illegible] me to play something 'fast and [illegible] ish.' I think the last of Ger[illegible] 'Henry the Eighth Dances' abou[illegible] the requirement. Listen to the [illegible] scarcely controlled rhythm of [illegible] number; I want to depict a [illegible] of almost Bacchanalian festivit[illegible] almost drunken revelry.

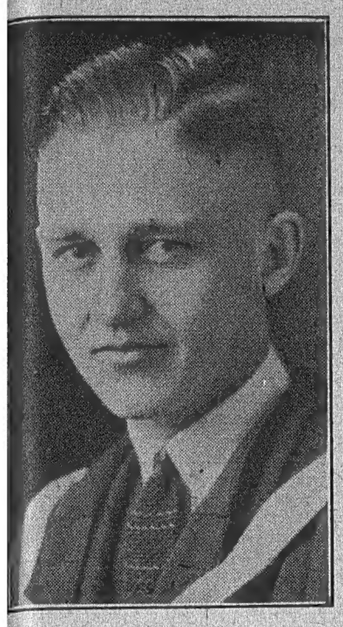
"One more example and I hav[illegible] ished. I have played you a s[illegible] Funeral March, I have played [illegible] a March of firm, kingly dignity[illegible] in Chopin's Military Polonai[illegible] have tried to depict the confiden[illegible] surance of a great man, proudly[illegible] boldly striding along. An[illegible] March-tune of a different stam[illegible] quicker rhythm and brighter[illegible] cents: I want to bring a qu[illegible] beat to your pulses, a springier[illegible] to your feet as you strain for[illegible] all excitement, to catch the [illegible] glimpse of the scarlet-coated [illegible] ment swinging down the street[illegible] colours flying in the breeze and[illegible] onets glinting in the sun, wit[illegible] the glittering panoply assoc[illegible] with war, e'er drab khaki rep[illegible] the scarlet and gold; I want a [illegible] of excited anticipation which[illegible] bring a lump to the throat a[illegible] catch to the breath, a mood that[illegible] leave you, when the regiment[illegible] passed away in the distance and[illegible] turn homeward, a mood that[illegible] leave you with your eyes [illegible] moist with very pride in your [illegible] try and of her fighting men, a [illegible] that will leave you with your h[illegible] uplifted in thankfulness to [illegible] God; in thankfulness that he [illegible] given you eyes to see and ears[illegible] good red blood to surge thr[illegible] your veins and set your pulses [illegible] ing, thnkfulness that you have[illegible] and health to enjoy to the ful[illegible] glorious, golden, God-given [illegible] shine.

Music and Its Mission

'The sphere of music is the[illegible] pression of feelings, moods, [illegible] pulses and emotions.' Pro[illegible] most of us have taken it some[illegible] for granted that music could [illegible] did fulfil its mission;—I have [illegible] to prove this fact to you this [illegible] ing and have endeavoured to [illegible] and explain to you some of the [illegible] and means by which the desire[illegible]

(Continued o[illegible] page six)

CLAIRE MANNING



An Appreciation

A good few years ago in Revelstoke, C., an event of much importance to the iversity of Alberta occurred. The Uni- rsity at that time did not pay much at- ntion to that event. Neither did Revel- oke. And as far as Revelstoke is con- rned, this article has no further need it, except to say that it was in this alled-in community that Claire F. Man- ing shoved up the census. He did not ay there long. Only long enough to atch the through trains stop and pick the rubber-neck cars, and to wonder here they went. One day he got on e. He saw where one went, but he has ver stopped wondering.

Arriving in Calgary at a tender age (as rdinary writers say) is right. But that not enough in this case as Claire is still nder. However, the Calgary Collegiate stitute induced him to visit there for a hile. His visit was of usual length, but that time he managed to become Sec- tary of the Lit and in the year follow- g Vice-President of the Lit.

After having no further wondering to do the C. C. I. he wondered what was at arsity. He came to Varsity. Nothing traordinary was happening, apparently. st another student who had ambitions to an educated Dentist, registering in Arts d Dentistry. It is understood he had s first toothache just about this time. nyway he hurriedly changed his course Arts. Many say Arts for fun. Many parently take Arts for fun, but not aire. He has taken Arts for four years w. He has had fun for four years w, and he has done much more student rk in these four years—real executive rk in many and diversified offices—than different kinds of ordinary students.

Claire is at present sporting editor of awful organ, but that does not in- ence the insertion of this melange. No! [illegible] as a testimonial of some val- able work he has accomplished, and as a ribute to the sunny smile which is never rned off. To the temperament and dis- sition which he possesses, to the Claire he is known and respected.

In his first year he was very quiet. He nly played House League Basketball and ier-Fac Hockey; acted as Asst. Advt. anager of The Gateway and at odd mo- nts played the part of stage hand at e Varsity plays. In his second year he d a little more. The Gateway promoted m to Advertising Manager. He still ayed H. L. Basketball. The Rink com- ittee grabbed him as secretary. So suc- ssful was he in moving stage furniture at he was made Treasurer of the Dra- atic Society and advanced another step, ing also promoted to Asst. Stage Boss.

One likely thinks on reading this that e had by this time done his share. But is is not the case. His third year saw m in a few more roles. To his athletic areer he added Soccer as one of his ccomplishments, playing on the Arts Inter- ac team, and continued to play H. L. asketball . The Gateway this year had im as Business Manager, and the Stu- nts Council met with him present. At is time he came from behind the cur- ins and made his bow to the public as actor in the Year Plays.

You say "surely he can do no more." ou are wrong. His Fourth Year, the ar just ending, saw him assume further sponsible positions. The students elected m to the post of Treasurer of the Stu- nts' Union. He still attended the meet- gs of the Students' Council. The Arts aculty used him as playing manager of e hockey team, as goal-keeper on the ccer team, and as forward on their bas- tball team. The Edmonton Boxing Com- ission was glad to have his services as ecretary. And now comes the position he d cast envious eyes upon for almost four ars—the climax of a successful Var- y life—the Girls' Hockey team possessed aire as coach. As a coach he was most ccessful, the girls being taken as far ast as Winnipeg, playing in five or six fferent western cities, and winning a ajority of their games. It is true to say at his name had nothing to do with this ppointment. And now the anti-climax! e Gateway sports page bears the little e at the top "Claire F. Manning, Sport- e Editor." Giving faithful reports on all hletic events, Claire made his page one e students could enjoy. His "Gym ms," give the touch, the intimate touch, the sport items, and are enjoyed by eryone.

The above list is only of Claire's ap- intments. Let us add a few personal tes. At dances he has always been a spicuous figure—the life of the party. cial engagements were many, and many re the parties he made successful. As snow-shoer few beat him, especially py- na snow-shoeing. He holds the Pem- na length record, beating Dune McNeil inches.

In casting over his record, one can ily believe that the only thing he wasn't s a Wauneita.

In conclusion, Claire carries with him his leaving, the well wishes of every dent, who all agree that Claire has ven, but has also received, and in this pect, one might well say that his Uni- rsity career was well worth while.

COACH BILL HOLDS TRAINING TABLE

Senior Hoopers Dangle Cutlery with the Elite of the "Fraternity"

JIMMY IS HOST AT DINNER

Few Personal Fouls, Although Gang was Checked Up for Many Technicals

The senior basketball team, champions of the Province and W. U. champs for the season just ended, were the guests of honour at a very enjoyable dinner party at the Macdonald hotel on Sunday night, Mar. 18th. Jimmy Bill, the coach, was cast in the role of anxious host. It appears that earlier in the year Mr. Bill had promised his collection of cultured athletes a banquet if they won the Provincial championship. Presumably the genial Bill counted on the boys forgetting this part of the arrangement (it is inconceivable that he should imagine them losing, but the 'bhoys' remembered, and coyly, but firmly, let him know that they remembered. Wonderful powers of concentration and memory these college boys have!

The banquet was, from all accounts, a swagger affair, and Mr. Bill's well known reputation for prodigality and lavishness in entertaining was more than upheld. Even the menus were in French, although this feature of the evening's entertainment was not without its embarrassing drawbacks. Bob Stoner likes steak well enough to order by its French name. But since that memorable meal he has developed a peculiar aversion to that species of gastronomical fodder known as 'sirloin, rare.' Painful memories seem to choke him, but there are some things that had best be left in abeyance. After the waiters had been tipped, metallurgically speaking, of course, the guests returned to Mr. Bill's house for the evening. The guests included Chancellor Stuart, Elie Butchart, George Parney, Keith Muir, Hugh Teskey, Anton Bures, Bob Baker, Bob Stoner, Osterland, Bill De Mille, Jack McAllister.

AN APPRECIATION

The Track Club wishes to express its appreciation to the members of the faculty who generously aided in making the Indoor Track Meet a success. Dr. McEachran, Hon. Pres. of the Track Club, was chairman of the day. Dr. Killam, the sprinting member of the faculty, was the clerk of the course. Dr. Campbell and Mr. Morrison acted as timers. Mr. Race and Dr. McGibbon were scorers, while Dr. Sheldon and Dean Howes were judges.

Pip Owen had his lungs in order as announcer, while our old friend Jack Buchanan handled the pistol.

Again the Track Club thanks all who helped to make the meet a wh[illegible] of a success.

University of Alberta Basketball Team 1922---23

WESTERN UNIVERSITIES CHAMPIONS
ALBERTA PROVINCIAL CHAMPIONS

SCORING SUMMARY OF BASKETBALL TEAM FOR 1922-23

The following will give an idea of the scoring ability of Parney, at centre and Butchart and Muir, forwards, of this year's team, for the ten games in which they played:—

	Baskets	Free Throws	Total Pts.
Butchart	58	96	212
Muir	33	2	68
Parney	61	0	122

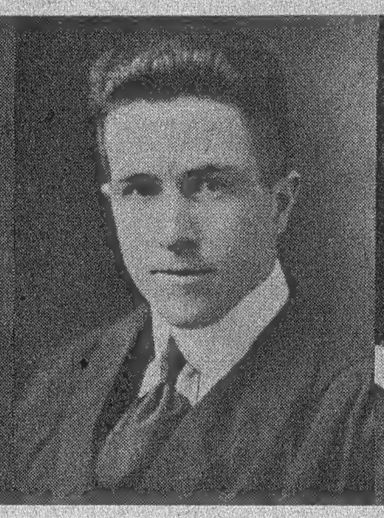
In the eleven games played, Varsity won 10 and drew one, for a total of 501 points as againt their opponents' 276, which also speaks volumes for the defense work of Teskey and McAllister. This gives them a majority of 225 points, which, averaged over the eleven games gave a majority per game of 20 5/11 points.

A record like the above is an enviable one, which the team can well be proud of. It will be a hard record to beat, but if the quality of basketball continues to improve as in past years, it is not by any means to be considered safe.

Jimmy Bill—Coach

Jack MacAllister

George Parney



Ellie Butchart—Captain

Keith Muir

Hugh Teskey

Bill De Mille

Bob Baker

Anton Bures

Bob Stoner

Bert Necker

Cliff Osterland

The Blue-Eyed Hero

By Geoffrey Hewelcke

In London there is a young fellow who lives by selling story-plots to unimaginative authors. I wish he would come over to this side of the Atlantic, for unimaginative authors abound here, and are apparently reduced to using standardized plots for their novels. This should be regarded as a National calamity, for it is the first sign of an atrophied intellect. Yet, nobdy seems to concern himself about it, and standardization goes merrily on. The worst examples of this are the numerous Western novels which are turned out every year. Hackneyed plot succeeds hackneyed plot in an almost unbroken procession. Now this is very wearying to the reader—I myself had the misfortune to read half-a-dozen of these novels in the last few months—and something should be done about it. I don't know whether plagiarism or mere laziness is responsible for this dearth of originality, but things have come to such a pass that I can now pick up the average Western novel, and, after a glance at the first few pages, can tell how it is going to end. That takes the enjoyment out of reading, and I object to it.

The most commonly used plot is that of the blue-eyed hero, to whom, in consequence, I have taken a most violent dislike. He is almost invariably described as a blond giant with dark-blue eyes, who, "wearied of the vicious round of pleasure," and, "having run the gamut of all the emotions," whatever that is, decided to chuck the life of idle ease which he had been leading since the death of his rich, but sometimes vulgar, sausage-making uncle. He left his gay companions of the Follies, left even the haughty Irene Vanderplunk, blinking away the tears from her highly beaded eyelashes and inwardly deciding to drop her hopes of a ducal coronet and to accept him if he should happen to propose a fifth time.

And now you have it. Our dashing hero had for the fourth time received his final "No", when he proposed conferring upon the haughty Irene Vanderplunk not only his uncle's fortune but his own name, which, oddly enough, has become also quite Dutch in sound, through the mere addition of a few letters through the length and breadth of it. Heart-sick and weary of soul our hero wandered down to the railway yards, with the half-formed intention of being found, next morning, dead, but little mutilated, with a heart-broken look of infinite sadness on his handsome features and a pathetic little note of farewell in his breast-pocket. He would mention no names and gave no definite reason why he had decided to end his life. He would merely say that he was weary of this useless existence, that since that evening an all-pervading blight had fallen over his life, that made it hopeless to even think of continuing to live. With a few more such sentences, rich with beautiful pathos, and a hope that a certain person "should now and again think of him," he would close—simply and heartbrokenly.

While he was thus pleasantly musing, he entered the railway yards and passed between two freight trains. A flash of light shone for an instant from the half open door of a freight-car, but our hero saw it not, and went on down the crunching cinder-track. The train thieves in the car, however, had no means of knowing that he was not hastening off to inform the police of their presence. Therefore, shortly afterwards half-a-dozen dark figures belaboured his head with odds and ends of lead pipes and other lethal weapons. He, not unnaturally irritated by this treatment, stretched unconscious four of the dastardly assailants, but in a busy moment was himself slugged with a crow-bar. For an instant he faltered in his smashing career, and immediately the other remaining attacker brought down his sledge-hammer on our hero's head. Oblivion followed, and when our now black-eyed hero once more opened his dark-blue orbs, he found himself lying on the side of the track, where an unsympathetic brakeman had deposited him.

The freight train, in which he had travelled so far, was disappearing down the line and whistling derisively. Our blond-haired hero teetered to his feet, his mind still full of fight for the freight thieves, but—and his jaw hung with amazement—where were they? As far as he remembered he had been fighting in a railway yard, and it was nighttime too. But this was the open country, and it was day-light. Our hero passed a grimy hand over a cinder-plastered forehead and started with dismay when he noticed how dirty it was. He looked down upon himself and saw that, in place of his immaculate evening suit, he was wearing filthy dungarees that even a hobo would eye with repulsion. His feet were stuffed into an aged and decrepit pair of brogans at least two sizes too large for him, and as for head covering, he simply had none.

I am giving the hero this method of arriving, because, on the whole, I believe it is the most uncommon. I've not read it more than three times.

Just then, though, of course, our hero did not know it, he was somewhere in Texas, actually in "the great open spaces of the West," and soon due to meet one of the "Great Hearted Men of the West" who though our hero was a native of the "Effete East" took him to his heart and ranch. Then it was that he found out that his heart had been urging him all the time to come to the West, "where Men are Men." He met, strangely enough, the rancher's daughter, who, odd to say, also had eyes of a deep gentian blue, and hair the colour of the coal-pile when viewed in the dark.

Then comes the most important and thrilling part of the book. It is the rescue. This is as essential to the story as the hero himself. Some novelists prefer to have this happen after the first meeting, but by far the great majority prefer this to constitute the meeting itself. Anyway all the novelists are unanimous in agreeing that the rescue is absolutely indispensable, for it is then that the ranch-girl's ravishing beauty caused the hero's navy blue eyes to pop,and he at once knows that he has found his soul-mate.

Then follows a series of gripping adventures in which the hero determinedly and single-handedly foiled either:

1. A group of cattle rustlers.
2. A band of Mexican outlaws, technically known as Greasers.
3. A crooked rancher who holds a mortgage over the head of the great-hearted father of the ravishing daughter, as a club to compel his own marriage with the aforementioned girl.

Failing these stock villains the author sometimes uses others which appeal to him more; such, for instance, as the rogue company promoter who has discovered oil on the rancher's land, but, rather than pay a fair price, tries to swindle the rancher out of his property.

There are a number of such plots that can be used, their chief requisite being that there should be some gun-play in them, in order that the hero may show off a peculiar gift of his of assimilating numbers of lead slugs from revolvers, without materially impairing his fighting capacity. And, oh yes, before I forget it, the hero is one of those exceptional men who are able to handle not only delicately, but also satisfactorily, the last scene which takes place on a hilltop overlooking the ranch. Three lone pines are silhouetted against a fried-egg-sunset, and the hero at last arrives at the point which it has taken him four hundred pages to reach.

A little work, a little play
To keep us going—and so good-day.

A little warmth, a little light
Of love's bestowing—and so good-night.

POETS AND WRITERS!

Encouraged by the success of the poetry competition the University Writers' Club proposes to publish a book of poems by students and graduates of the University. This scheme sounds ambitious, but if all those inclined to writing will put themselves through vigorous practice between now and the fall term, the result will be an unexepected revelation of talent. Such a book was published at the University of British Columbia a few years ago. It is proposed to put out the book next Christmas as a Christmas gift that any student should be proud to give. Of course, only if the poems submitted are of a high quality will the book be published. Have your poetry ready for the fall term. Now is the time to start!

IN BOTH

A soldier was crossing a barrack square with a pail in which he was going to get some water.

A sergeant, passing at the time, noticed that he was wearing a very disreputable-looking pair of trousers. So he stopped him and asked:

"Where are you going?"

"To get some water."

"What! In those trousers?"

"No, sergeant. In the pail."

PERSONALITY

Were there no I,
What motives could life's pulse impart
To rouse one from his lethargy?
Think you, could friends invade one's heart
And stir his latent energy
Were he a fly?

What use to try;
No bird or flow'r could one admire,
No summer day could make one glad,
No human voice could one inspire,
Nor mere mechanics make one sad,
Were I not I.

Were there no I,
Who'd care to live or fear to die
Were there no soul to grow and know?
Each self would like a bobbin ply
All day unconscious to and fro
Then dormant lie.

What form am I?
A mere excretion of the brain—
Concomitant of many cells
Coordinated like a train
And fed with fuels—potential spells
The riddle—I.

What makes the I?
Not fame or name, nor caste or rank,
These are Dame Fortune's replica;
'Tis true, our forbears we must thank
To wear their proud insignia—

These are not—I.
The character of each heart-beat,
Its willingness to learn and teach,
One's attitude in home and street,
And gesture, tone, and native speech
Depict the I.

Can actions lie?
The sacrifice from which one shrinks,
The broken heart and head uncrowned,
The cup of bitterness one drinks
And misery in service drowned

—H. FISHER.

Important New Discovery by Professor J. B. Collip

(Continued from page one)

extracts were administered to diabetic dogs and caused a fall in their blood-sugar and in their excretion of sugar in the urine.

Glucokinin

The successful results thus obtained were not made public. Dr. Collip continued his investigations. He argued that since the yeast is a plant organism, similar results could be obtained from experiments with other plants. At the suggestion of Dr. F. J. Lewis, Professor of Botany in the University of Alberta, onions were used and from them Dr. Collip was successful in obtaining extracts which when administered to a diabetic dog alleviated the symptoms of diabetes. These successes had no marked effect on Professor Collip's thirst for research. He continued his investigations and obtained extracts from Baker's yeast, Brewer's yeast, green onion tops, onion roots, barley roots, sprouted grain, green wheat leaves, bean tops and lettuce.

The significance of Prof. Collip's new discovery is two-fold. In the first place it is of great scientific importance for it practically proves the presence of a hormone in all plants which are sugar burners as well as sugar producers. In the second place it is of great practical importance for it offers now a new and richer source from which extracts with the same properties as insulin may be obtained.

As already stated "insulin" is the name given by the group of Toronto investigators to the extracts of pancreas prepared by a process developed by Dr. Collip and known as "Collip's Method." The new extracts containing the plant hormone, Dr. Collip has chosen to call "Glucokinin."

At the March 21st meeting of the Society of Experimental Biology and Medicine in New York a paper by Dr. Collip on his latest discovery was read.

The paper concludes as follows:

> "That this hormone (Glucokinin) will be useful in the treatment of diabetes mellitus in the human subject there can be little doubt. Judging by the results obtained on diabetic animals it will in some ways be much superior to insulin. Its effect develops slowly and is long maintained. The fact that relatively crude extracts of many plant tissues are practically non-toxic is also a factor of great practical importance."

The action of insulin when administered to a diabetic does not as a rule last long. It has to be given regularly once, twice and sometimes three times a day so as to prevent the return of the symptoms of diabetes. It was pointed out that extracts of pancreas were difficult to prepare because of toxic substances they contained. Glucokinin according to the above quotation, may prove in both particulars more advantageous than insulin and may in all probability supersede it.

RESEARCH REAL SIGN OF LIFE

SCIENCE ASSOCIATION OF THE U. OF A. PLAYS IMPORTANT PART IN DEVELOPING THE SPIRIT OF RESEARCH AND PROGRESS

It is probably true that the majority of people think of the University simply as a glorified High School. Since it is the students, largely, who advertise the institution throughout the breadth and length of the Province, it is quite natural that the public should suppose that it exists solely for their education and entertainment. A great many of the students themselves believe this, and it is in light that they represent it to outsiders—but that is only one side of the picture.

It is true that young people come to the University to study just as they go to High School and that the professors spend a considerable part of their time lecturing and assisting the students in their work. The difference, however, is that the professors besides being teachers, are students and the buildings of the University of Alberta besides providing accomodation for classes to meet, afford facilities for research work of various kinds. The leaders of the University never reach the stage when they feel that their information is complete and that they can devote the rest of their lives merely to teaching what they already know. They have an insatiable thirst for knowledge and it is often at a sacrifice that they spare time from their investigations to help us over the difficult places in our study, imparting to us some of their wisdom and beckoning us along the road which they have travelled.

The work which they do is seldom spectacular and is done so quietly that we rarely hear about it. Even the valuable contributions made by Alberta men during the war received little publicity or recognition. Their efforts since then have not been relaxed and although we cannot appreciate the full significance of all their discoveries, we know that steady and substantial progress has been made.

In 1919, the professors and lecturers in the various scientific departments who reassembled here organized themselves into "The Science Association of the University of Alberta" in order to stimulate research and to promote scientific discussion. The Association is divided at present into two sections, one of which consists of the mathematical, physical, physico-chemical, and geological sciences, while the other comprises the biological, medical and bichemical ones. These branches meet once a month in alternate fortnights, and on special occasions the Association meets as a whole. At these sessions, papers are read by members who have been doing research work, and their methods and results are discussed and cricitized by the other members. These discussions and criticism are preliminary to the publication of the papers in various British, American and Canadian scientific journals. In view of the interdependence of the different branches of science, this criticism is of great value and if it is found that before the final result can be obtained more than one science must be consulted, this organization makes it possible for the authorities on each to collaborate efficiently. Finally, we must think of this group of men as one of the units in the van-guard of Progress, steadily pushing back the frontiers of Ignorance and advancing the standard of Civilization.

"GENEVIEVE MURPHY"

By James G. MacGregor

The name "Genevieve Murphy" is enough to lead anybody astray. Everybody knows some Genevieve or other, and has his own conception of what the name implies. One friend of mine has a Genevieve whom he adores, and for whom he says he would do anything. Another friend detests that name because he lives next door to a young lady who takes singing lessons, and who shrieks out incessantly, "Oh Genevieve—Sweet Genevieve." To another friend of mine the name signifies a new brand of wheat. For me, however, the name has a far deeper meaning than any of these. Genevieve Murphy is, to my mind, not an angelic girl, not an aspirant to vocal fame, not even a new brand of wheat; she is only an old, dead, but not forgotten, pig.

Let me explain how a pig came to possess such a high-sounding name. When we bought this particular animal she had a turned-up nose that reminded my brother of an Irish woman, and consequently she was named Mrs. Murphy. Somebody saw a marked resemblance, shortly afterwards, to a certain red-haired girl who worked in the village drug store. This girl's name was Genevieve, and our innocent old pig had to be re-christened. Thenceforth our old white sow was not an ordinary pig; she was Genevieve Murphy, and carried herself as such.

Many animals on a farm, such as rams, and mules, are contrary, but the most obstinate that a farmer has to deal with are pigs. Just as pigs are the most stubborn of animals, so Genevieve was the most stubborn of pigs, for if ever we wanted her to do anything, that was the very thing she would not do. One day it was necessary to load her into a wagon, but she could not see it that way at all. To ride in an old farm wagon was absolutely against her pig principles, so she put her foot down and would not go into it. The wagon was set in such a position that she could easily enter it, but her mind was set in such a position that she would not walk into the vehicle. We coaxed her along with a bucketful of oats, called her "a nice old piggie," and did all sorts of things in order to get on the best side of her, but all this availed us little.

Our patience finally gave out and we resorted to force. We chased Genevieve into the narrow corner where the wagon was, and for a while things seemed to be going fine. There were three of us against one pig, so why shouldn't we succeed? We crept nearer, inch by inch until she had only two feet more to go. She looked at the wagon box and then at us, as if trying to decide which way to go. If she went ahead she would lose the battle, but if she turned around and tried to get away from us and from our monstrous clubs, it looked as if she might her lose her consciousness. She seemed to consider this for a while, and then turned to the wagon as if she were going to submit. We rejoiced, and the tenseness of the situation relaxed slightly. We gained another three inches, and Dad, who was on the opposite side of the corner to me, administered a little persuasion with his cudgel. Alas, Genevieve dodged him swiftly and made for me. I tried to ward off the attack, but in a second I was astride an angry pig, and in another second was sitting on the sharp edge of an extremely hard rock. The pig had escaped and was standing at the opposite side of the pig-pen looking at us triumphantly. The other two pigherders did not know whether to be merry or angry. I knew; I grabbed my shillelah and ran after the victorious pig. After running about ten laps I had exhausted all my breath and only half my exasperation. I threw my club at her and expressed the opinion that Hades was too cool for such an unladylike pig. She would not argue, however, and the only answer I got was a grunt which might have meant anything. It was not till after many more such nerve-trying experiences that we got her into the wagon.

Our pig-pen fence was made of rails about six inches apart. Genevieve, who was obstinate in everything else, could not be expected to remain quietly in a pen. The first time she felt like escaping she did so by putting her immense snout between the rails and prying them off as if they had been toothpicks. We repaired the fence so that she could not get her snout in between the rails any more, and put her back in again. She went back to the same place to try the old trick, but did not succeed. She came back suspiciously and looked at us defiantly, considering all the while what to do next. We stood looking over the fence at her and said, "Get out now if you can." She looked at us as much as to say, "Keep me in now if you can." When she had walked around the fence once more, she deliberately put her front feet on the top rail, and using her hind ones as if she were climbing a ladder, soon succeeded in escaping.

We repaired the fence many times, but each time she outwitted us. When we thought ourselve most secure, she would manage to get out by hook or by crook. She was such a nuisance that we decided the only place in which to keep her securely was the pork-barrel. To her last moments she was contrary. We wanted to shoot her so as to stun her, but she would not separate herself from the other pigs. After much exasperating manoeuvering we killed her. But even when Genevieve was cooked and served up for dinner, she was her same old self: obstinate and tough.

Writers' Club Weekly Rendezvous

In the Writer's Club Poetry Competition, "Peace," by Barbara Villy, was the prize-winning poem which was published in the last issue of The Gateway. The following two poems, "The Blizzard" and "The Pilgrim" received honorable mention in the order given.

THE BLIZZARD

By T. C. M. Hargreave

Last night to northward, quivering shafts of light
In such weird pillars cleft the gloom of night,—
Awestruck I marveled, wondering what the power
That unseen, builded high each mystic tower.
My eyes drank in the glory, yet I feared
'Twas no vain boast—those battlements up-reared . . . .
Now, while my pony labours through each swell
Of snow, the cattle lift their heads to smell
The fickle icy breaths that through the sage
Search cautiously the prairie's open page.
By instinct sure, hard gained in blizzards cold
They know and turn toward nature's ready fold—
The badlands deep, sharp-creased in grotesque heaves,
Where blasts but whisper as the rustling leaves;
Hard flakes grate, a dull space-filling roar
Memorials to the elements' stealthy power—
Rough hacked coule and rugged sentinel tower . . .
A coyote skulking through the wolf-willow
For chicken dormant 'neath some feathery billow,
Stiffens, attentive: notes the scudding haze
Low in the greying sky, with furtive gaze;
Cock-eared he heeds the warning of his kind—
A brother's storm cry on the rising wind . . . .
A lank jack-rabbit startled from his form,
With quivering nose attests the coming storm,
Then bobs away—to fade snow into snow—
To far ravine and burrow hidden low . . . .
Alone, alone,—small on the dreary waste—
All contours by the smothering swirl effaced.
Hard flakes grate, a dull space-filling roar
Snuffs all sound else, to side, behind, before.
The wreaths of snow flit by—thin hoary ghosts,
The storm king's vanguard, eerie spectral ghosts
That fawn and tug and leer in maniac fun
And beckon and clutch and moan—"You're ours—you're done."
Sun blotted out my pony tiring fast,
Yet Shag breasts on unerring 'gainst the blast . . . .
Dim hazy blur—corrals nigh drifted o'er,
And now looms up the weathered stable door . . . .
The day's work done; my pony brushed and fed.
The kettle hums, the stove glows cheery red.
Without—a frozen hell—fiends shriek, now loud,
Now muffled, lost in the o'erwhelming shroud.

THE PILGRIM

By P. Lagerquist

Stretch—mark—rise—stretch—mark—rise
Till the skin's worn off the fingers
And the dust has filled the eyes
And the merest remnant lingers
Of the former stately robe.

Stretch—mark—rise—stretch—mark—rise
Through the throng's ceaseless greeting
Out on to the sandy dune
In the chills of winter's sleets
In the hottest days of June.

Stretch—mark—rise—stretch—mark—rise
Though his hairs are turning whiter
And his heavy steps are slow
Still his soul is growing lighter
And he cannot help but go.

Stretch—mark—rise—stretch—mark—rise
A youth it was that started
On this life-long pilgrimage
Youthfulness and strength departed
He is now infirm with age.

Stretch—mark—rise—stretch—mark—rise
Summons all his fading strength
Staggers to the idol—sighs—
Falling on the ground at length
Smiling now the pilgrim dies.

There is a custom, handed down through the centuries, prevalent among the Buddist fanatics. It consists of "measuring the length to a certain shrine." The penitent lies down, makes a mark with his outstretched hand—rises, toes the mark and lies down again. This is repeated—thus the penance is in reality "measuring one's length." Cases have been known where distances of 1,500 miles have ben covered by one man in this fashion—one spent 17 years in doing it and died in the arms of the temple-keeper.

ALTA. PROFESSOR GETS PROMOTION

Member of U. of A. Biochemistry Staff Promoted to Position of Dominion Bacteriologist

At the beginning of April of this year Dr. Allan Grant Lochhead of the Department of Biochemistry of the University of Alberta left for Ottawa where he has taken up the duties of Dominion Bacteriologist. This office has just been established by the Department of Agriculture. The object of the work to be undertaken by Dr. Lochhead's department was defined in the last issue of the Agricultural Gazette as follows:

> "The Division of Bacteriology of the Experimental Farms Branch, just recently formed, has for its object the carrying out of Bacteriological investigations connected with the research work of several other divisions on the Central Farm, in addition to such independent investigations as may be found desirable from time to time. One great need for this division is in connection with work in dairy bacteriology and with the health of animals from the point of view of stable sanitation. There is also a wide field of work in connection with the bacteriology of soils and fertilizers as well as many problems in connection with poultry work. In fact, there are few, if any, divisions of the work in the Experimental Farms Branch where problems in bacteriology do not press for solution."

Dr. Lochhead is a McGill B.A., M.Sc. and Ph.D. Just previous to the War he spent two years in Germany doing post graduate work in Agricultural Bacteriology at the University of Leipsic. Last fall he joined the Biochemistry Department of the U. of A. as assistant to Professor Collip.

Although he was with us only one session, Dr. Lochhead was much liked by staff and students of the University of Alberta. The news of his departure was received with regret but we all join in wishing him continued success in his new enterprise.

THE VILLAGE SCAVENGER

By "Mary Monfils"

Hughie was the village scavenger. He attached great importance to his calling, had convinced many that to be a good scavenger was to perform a very necessary and honorable service. He told the new minister, a fellow fresh from college, that there was one doctor, one minister, and one scavenger in the village now, and that it would be a disgrace if, between them, they could not keep the place and the people clean. He did his part well. Tourists wrote about the clean streets and medical statistics showed that the village was almost free from epidemics. This was good advertisement and brought returns every summer. It would have been ungrateful, to say the least of it, to despise the man who made this possible, and so, he was on speaking terms with more people, high and low, than any of his neighbours were.

He had a two-wheeled cart and an old Clydesdale mare. He had named the mare Lady Mary, after Lady Mary Dunbar. He said they were alike in temperament; neither of them would go but "ae gait" and that her own. He started work at four a.m. in the summer. Rain or shine he whistled, sang, or talked in a loud voice to "her ladyship" as he worked. One would have thought that cleaning ash-pits and collecting rubbish was apparently the most congenial work in the world. Light sleepers were awakened by him, and tossed about until the rumble of his heavy cart and the clip-clap of Lady Mary's feet had died away in the distance.

His language was characteristic of the man. It flowed from his lips and it was often more expressive than well chosen. Everybody knew what he had said to the minister's wife when he first met her, for she had told it herself. The schoolmaster thought it was his duty to remonstrate with him, because many of the boys were using his expressions. He was hurt when he was told he was a bad example, and he promised to reform. His efforts to break the swearing habit caused amusement. Finally he gave up trying. He thought it was inconsiderate of the school-master not to take into account the fact that he had never gone to school to study in the dictionary. He had to use the words he knew, and, as long as he made his meaning clear, he could see little harm in a "good clean swear."

A glimpse of him on the street made one ashamed of being grumpy. Strangers smiled involuntarily when they passed him. As he swung along with his shovel on his shoulder one. He gave one the feeling that by the strange dignity of the man. He was perfectly at ease with any one. He gave one th feeling that he had nothing to conceal, and that the thing one did not have were not worth worrying about.

He was talented in a very unusual way. He spent his spare time in summer on the commons, weaving bouquets from the wild flowers that grew there. These bouquets were very beautifully and skilfully made. The laird found him at this occupation one day and infomed him that he had artistic ability. This conveyed no meaning to Hughie. The laird had him make two bouquets for the flower show in the city, and no one could have been more surprised than Hughie when he received a half sovereign as prize money. People woke up to the fact that his "bonny bunches" were of value and it became customary to have him make a bouquet to give to a guest going back to the city.

How he was able to keep eight children and save a little out of his meagre earnings puzzled many. He gave all the credit to his wife. She was the only woman worth having. His children were bright and well cared for, and as they filed past him into their pew on Sundays, one realised how proud of them he was. His cottage was humble, his fare plain but his home was a happy one. He worked hard and honestly and his wife planned and saved. To live without luxuries was not hard when they were realising their ambitions of giving to their children advantages they had never had, and of having enough to put away, so that when their rainy day did come, they would be independent.

Hughie was poor and illiterate but he played a great part in the life of the village. The sparkle of his humour appealed to most people and his optimism brightened the darkest day. His speech was rough but never vulgar, his manner respectful but never cringing. As a husband and father no one surpassed him. The greatest thing about him was his attitude towards work. No one ever demonstrated more clearly than he how dignified it is to do the meanest task well, and how fine a thing it is to be happy in the doing of it. He gave of his best to this life, and surely in this he has much in common with men who, born in happier circumstances, have become great.

THE BRONCHO

By H. Lynch-Staunton

To the man from the city a bucking horse is a wonder, if not a novelty; to the cattle ranchers of Southern Alberta it is an everyday occurrence.

There are three types of bronchos: the horse that bucks, the horse that runs, and the horse that sulks and kicks.

There is no more queer sensation than to get on a bucking horse for the first time. With the first jump the rider reaches desperately for the horn of the saddle, but it is very seldom that he finds it. He feels himself rising and falling with lightning rapidity. One foot is out of the stirrup. He is going! His horse jumps sideways. The rider finds himself over on one side and hanging to the saddle horn with both hands. Another lurch! The next moment the rider is picking himself up off the ground and wondering that he is alive to tell the tale.

The horse that runs is almost as bad as the horse that bucks for an unexperienced rider. He runs arund the corral until the rider is fairly dizzy. Presently he slows down. The rider, who is getting tired and wants to get off, shifts his weight a little to one side. The horse starts to run again and the monotonous ride is resumed. Again the rider tries to get off and again the horse speeds up. The rider gets desperate. The next time he comes near the fence he grabs the top rail and jumps from the horse on to it. This is, in some cases, the only way in which a rider can dismount.

Another type of broncho is the horse that sulks and kicks. Every time the rider moves, the horse kicks out with both hind feet, or worse still, kicks at the stirrups or the saddle. The experienced man knows how to deal with this kind of animal. He simply takes his quirt and beats the horse until it either bucks or runs. The inexperienced man, however, does not usually find such a happy solution to the problem. In the first place, he is afraid to quirt the horse for fear it will buck him off, and in the second place he is afraid to take his hand off the horn to use his whip. The horn and a man who is learning to ride are inseparable pals.

The next problem that the rider is up against is one which a man from the city would say was the simplest: that of getting off. It is not as easy as it might appear, however. The rider is afraid to jump off for fear the horse will kill him; he is afraid to stay on for fear the horse will buck him off. I remember once seeing a man get out of this unpleasant position in a very novel manner. He told us to open the corral gate, which we did reluctantly. The horse immediately rushed for the open, but as was passing under the cross bar of the gate, the rider leapt up and grabbed it. The horse went on, leaving his rider safe and sound, though rather scared, hanging to the crossbar by his hands.

LAST MEETING OF DRAMATIC

At the last meeting of the Dramatic Society the following offices were elected for the coming year:

Hon Pres. ..... Dr. Gorde
Pres. ..... Ted Gowa
Vice-Pres. ..... Barbara Vil
Secretary ..... Charlie Fla
Treasurer ..... Norman Scot

The question of presenting the "A's" was next discussed, and the following by-law passed:—

Resolved that students of the University of Alberta showing particular dramatic ability be recommended for A's as provided in the amendment to the Constitution of the Students' Union of the University of Alberta subject to the following conditions and restrictions:

1. That the recipient shall have taken a major part in (a) Two annual plays of the Dramatic Society; or (b) One annual play and one minor play of the Dramatic Society; or (c) Three minor plays of the Dramatic Society with conspicuous ability in all three.
2. That recipients shall be individually recommended for one award by the Executive of the Dramatic Society in consultation, if possible, with the Directors of the plays in which that individual has taken part.
3. That the plays in question shall be of generally acknowledged high literary and dramatic value.

STRIKING MUSICAL ADDRESS DELIVERED BY A MASTE

(Continued from page four)

sult may be attained.

"Mark, I say 'some of the ways and means'—most of the tricks of rhythm and harmony which I have exemplified tonight are the ordinary stock-in-trade of the average amateur composer like Mr. Jack Olive and myself; they have been used over and over again for so many decades that they are just as 'sure fire' a success as the 'bursting buds and 'frolicking lambkins' are to the amateur spring-poet, or the 'silver moon-light' and 'baby's eyes' to the writer of the present day popular song.

"The genius is the man who finds new ways of expressing himself, his feelings, his impulses"